Registered at the G.P.O., Sydney, for Transmission by Post as a Newspaper. Published Weekly.

THE MEDICAL JOURNAL OF AUSTRALIA

(With which "The Australasian Medical Gazette," and "The Australian Medical Journal" are incorporated.)

The Journal of the Australian Branches of the British Medical Association

VOL. II.—6TH YEAR—NO. 19. SYDNEY: SATURDAY, NOVEMBER 8, 1919. PRICE 6D.

THE MEDICAL JOURNAL OF AUSTRALIA.

VOL. II.—6TH YEAR. SYDNEY: SATURDAY, NOVEMBER 8, 1919. No. 19.

INTESTINAL OBSTRUCTION.[1]

By **R. A. Macleod, M.D., M.S. (Glasg.),**
Gympie, Queensland.

Looking back on a thirty odd years' experience there is no class of disease which has offered such difficulties in diagnosis, or has caused so much anxiety with its many harassing surroundings as intestinal obstruction. In either hospital or private practice the doubt which exists in the earlier cases, sometimes increased by one's relations to the patient, has made the responsibility a serious burden. It has been remarked by Treves that in no group of symptoms have so many mistakes in the early diagnosis been made and this I can fully confirm. Looking back I have tried to account for some of the errors made by myself and have attempted to explain these and find a better course of procedure. Not all are due to the individual; some are due to a narrower experience; some to the teachings at the various schools and some to what I would consider a faulty classification. Faults due to classification may not at first sight seem a very obvious cause of misinterpretation of symptoms, but I think on looking into it, it may be shown to be one of the causes of putting the attention on to the wrong track with a misdirection of the energies.

W. D'Arcy Power states:—

> Intestinal obstruction is a clinical term for a condition produced by many different causes. It is classified broadly into acute and chronic obstruction, but such a classification is bad, because it implies a distinction which is often absent. Cases of intestinal obstruction, therefore, are often incorrectly diagnosed and badly treated, because they have not fallen readily into one of the two groups.

If the distinction is made between acute and chronic, it will be found that they pass gradually into each other and only a shadowy line of demarcation is possible between them. Just as it is impossible to state definitely when night passes into day, or when a boy passes into the adult stage, so it is impossible to make any definite differentiation between them. The object of any such division has been entirely for purposes of description and demonstration, but in doing this the attention is apt to be centred on statements which do not quite coincide with the phenomena under observation; at least, there is a tendency in the desire to make the descriptions and the various teachings appear more definite than they really are, in order to get a neat and clean cut definition and too much attention is paid to one set of phenomena and too little to the other. In the division into acute and chronic the expression obstruction is always to the fore, but this by no means explains the whole story nor the main part of it, as it is well known that constipation may last for weeks without harm, nor in the division into two species are the symptoms the same.

In the acute form it is the stoppage of the blood supply that is the dominant factor and the subsequent strangulation is the immediate cause of the subsequent symptoms. In the chronic form distension and hypertrophy of the wall of the bowel, ulcers of the stercoral form and peritonitis, are the predominant factors. It is true that an acute form often supervenes suddenly on the chronic form and may be the first intimation that is received that anything abnormal exists, but the symptoms are mostly of a much milder form than in the acute obstruction; Druitt states that on this account this particular supervention should be included in the chronic cases. In the history there is a difference in that it nearly always occurs in the acute form in a patient who has previously been in good health and free from any disease, although he may previously have had appendicitis or peritonitis to account for the acute attack. While in the chronic form continual bouts of constipation or constipation alternating with diarrhœa, are usually elicited.

When I started medicine Bristowe was a leading authority and he described a block in the blood vessels as vascular obstruction. As a result of the work of Virchow and others a new word was coined and embolus came into fashion, to distinguish the part detached from the thrombus. I consider this introduction was a great mental help, as it concentrated the attention on the pathological condition and left the obstruction somewhat in the background. For example, the condition hydronephosis is the result of an obstruction to the ureter, ranula an obstruction to the salivary duct. The use of these distinct words has also the effect of drawing the attention to conditions attending it. In a similar way hernia is used to signify an obstruction to the bowel, but the block to the passage of fæces is not the essential condition; the changes in the bowel are all important. I think if the word acute obstruction were changed into, say, "acute strangulation," it would lead the mind to consider the various symptoms produced, as more connected with the stoppage in the blood vessels and the attendant inflammatory changes that follow in its wake. Like so many cases in natural history the obvious sign or character is not the most essential one. The actual stoppage of fæces is not so important or productive of clinical symptoms as the toxic and other changes of an inflammatory nature. In chronic obstruction the stoppage is more important, but as simple stricture or malignant disease forms the bulk of these cases, the conditions leading to death take a different form; stercoral ulceration with perforation, hypertrophy with dilatation of the bowel and toxæmia form more slowly and the history is different. Sub-acute cases, such as intussusception lasting over a month, come in between, but a hard and fast line would be difficult to draw. If the total cases were thus divided, I think it would help a little to draw attention to the symptoms and their causes more accurately. The pathological findings have been well and clearly classified on a natural history plan, like cases being grouped together, but the clinical symptoms exhibited at the bedside have not as yet

[1] Read at a Meeting of the Queensland Branch of the British Medical Association on October 3, 1919.

been brought into line with these various causes. There are, perhaps, few diseases where the co-ordination between clinical symptoms and pathological findings are so out of touch with each other. By this I mean that the subjective and physical signs are not concomitant variations of the results found post-mortem. Acute cases are practically internal strangulated hernias. Take the cases of bands, holes in the mesentery, volvulus and intussusception; all these are similar in their clinical and pathological conditions. Although this may not be quite apparent in an acute intussusception, it will be found that the entering and returning layer—the intussusceptum—and the sheath —the intussuscipiens—have assumed such a position that strangulation or stoppage takes place, first in the veins and then in the arteries. This position depends on the one layer being inside the other, while the mesentery with the blood vessels is dragged in. The strangulation results in the production of œdema, stasis and finally toxic conditions. The increased virulence of the micro-organisms and the general conditions are analogous to hernia. If to this is added shock, it seems to me that the analogy is unmistakable.

I have calculated roughly the cases published by Treves, Leichtenstern and Adams and Cassidy and find that intussusception forms 35%, adhesions and bands 23%, volvulus 4%, Meckel's diverticulum, gall stones, internal hernia 8%, making in all about 70% that could be classed as acute cases. The chronic cases represented about 27% and paralytic obstruction, formerly called pseudo-strangulation, about 3%.

In hernia we have pain, vomiting, constipation, shock and a tumour visible externally. In intussusception the symptoms are practically the same when the tumour is situated internally. All the other forms of intestinal obstruction have the same class of symptoms with small variations, such as the rapid and increasing distension of the abdomen, caused by a volvulus, or hæmorrhage from the rectum caused by intussusception; so that I think they may be fairly classed as acute strangulation. In hernia we know where the damage is. In internal strangulation or obstruction the difficulty is to find it. If we could be sure of the nature of the block, the treatment would be on similar lines.

The first line of enquiry is the history. It seems that some of our teachers make a mistake; they say the history is most important and dismiss it with a few words. It is important, but it is also in my opinion a difficult matter sometimes to get a fair history. Impatience is difficult to avoid. So much also depends on the intelligence of the patient and the constant interspersion of theories and deductions with facts is trying, but this is the least difficulty. Adams and Cassidy in their "Acute Abdominal Diseases" state: "The importance of a careful and complete history of every case of acute abdominal disease can hardly be over-estimated; the information gained thereby is at least equal to that derived from a physical examination of the patient." They then state how a stone in the ureter was mistaken for appendicitis and led to an operation being performed and that a subsequent X-ray examination revealed the true cause. Although this was the true cause, it was a simple error in diagnosis, not history. They then state that the subsequent history disclosed the passage of smoky urine. Now, considering that the patient was presumably ill and that he passed his urine into a *pot de chambre* without the aid of a urine glass held up to the light, what chance would one have of detecting the smoky urine. It seems as if the bedside information was sacrificed to making a logically complete book.

It has happened to many of us to come to the conclusion that a case was appendicitis; an examination of the urine has showed micro-organisms and the pyelitis came to light, but even so one may make a careful note of the respiratory and circulatory system and all the other systems and be far from a correct diagnosis. A disease is a group of symptoms. Take a case of exophthalmic goître. If exophthalmic, quick pulse, enlarged thyroid and tremor are present, the diagnosis offers little difficulty, but any one of these symptoms may belong to some other disease. It is not only the individual factors, but the relations between these factors, either consecutive or simultaneous and the importance of any individual factor which makes the disease definite. The particular symptoms observed at the bedside are signs, characters or marks of some disease, but until these marks are grouped together and put into their proper relation, you have not established a case which entitles you to put a definite label on the group. The real test of a good classification is that significant propositions may be made about it, as, for example, when exophthalmic goître is labelled, it connates the four symptoms I have mentioned. The same applies to intestinal obstruction with its four symptoms, pain vomiting, constipation and shock. So many diseases have these symptoms that you want to have a clear and vivid remembrance of a large number of diseases before you can say what particular disease exactly fits the clinical symptoms observed. The human mind can only well attend to one thing well at a time and I believe it is almost impossible for the average man to remember all these diseases unless he writes them down on a piece of paper; even then it is not easy. It has happened to me to think I had done all that was possible, but on holding a consultation with a colleague, I have found out how much I had missed; the view of my colleague has thrown a new light on the case.

It certainly is quite as important to get a good history as to elicit the physical signs. But, then, medicine is an art and an art is only learned by those who practice it. This only comes to those who have had prolonged experience and know not only all the labels put on disease, but the symptoms grouped under them as well and can handle them with familiarity and ease. It requires constant practice to be able to put the information into its proper place. It is quite as difficult to interpret what is told you by the patient as to place in proper order all the physical symptoms. Take the case of cancer of the stomach or duodenal ulcer. There is most likely little to be found and the various statements have to be grouped properly before accuracy can be obtained. This may not seem to bear directly on obstruction, but in this

case the history is important. A previous hernia, or an operation, or a peritonitis may lead to bands and there may be tubercular glands in the abdomen. I have just signed a death certificate of a child two years old, who was perfectly healthy to look at, but had been constipated all its life. It had an attack of screaming with pain; a lump was discovered in the abdomen, which appeared to be an intussusception. The mother stated that she had felt this twice before. Copious enemata reduced it, as I thought if it had disappeared before, it might do so again. To-day the child was being brought to the hospital, but died with all symptoms of acute intussusception.

I maintain it is more difficult to take a reliable history than some authorities appear to think.

Pain is a subjective symptom. There is often great difficulty in getting a good interpretation. The remark that familiarity with a thing does not always mean a clear knowledge of it applies more particularly to this than any other symptom. I had read what Sir James Mackenzie has to say about symptoms and their interpretation and was astonished at the advance made. I have tried his methods; perhaps I lack the skill, but I have not been so fortunate as to find all that he claims. I think that he has demonstrated that pain in the abdominal organ is a referred pain and that the small intestine pain is in the midline and near the umbilicus; that large bowel pain is in the hypogastrium; and that pain produced in the ovarian region is referred to a particular situation. He also states that pain on light percussion is indicative of peritonitis. I have not been able to persuade myself of the various subdivisions which have been made. Still, it is some advance to be able with some degree of probability to state that the seat of the mischief is in the small or large intestine, as the case may be.

Peristaltic pain may be guessed at sometimes; the patient may state that it is throbbing or boring, but beyond this I have not been able to go. The length between the attacks of pain and the fact that it is of a constant nature, with acute exacerbations, may be important. When the interval between the pains has gradually lessened, it may be assumed that the case is becoming graver. Its localization may help, but I think Treves is right when he states that the symptoms may be most deceptive and lead one astray. It is the combination of localized pain with the group of symptoms that makes it valuable.

The second symptom, vomiting, has in the larger number of acute cases a peculiarity, that is, that it is of strong projectile nature. All the muscles are brought into play. It is quite different from that of peritonitis when it simply wells up and comes with very little force from the stomach. On considering the act of vomiting when the diaphragm and all the abdominal muscles are brought into play, the difference seems to me that in peritonitis the abdominal muscles, being either rigid or on guard, owing to a reflex stimulation coming from the cord, have their centre, so to speak, engaged at the time and when the reflex act takes place this engagement, occupying the motor centres of the spinal cord, prevents any further stimulus; the action of the stomach is brought into play and the emptying of this viscus is the only act concerned. In strangulation of the bowel, on the other hand, the centres of the vagus and sympathetic have full play, hence the strong and projectile nature of the fluid emitted. If the cases permit of watching from the first, the nature of the contents of the stomach vomited are important; the order is, food or remnants, the bilious material and finally a yellow fluid with a faeculent odour. This odour should not be, but often is, the first sign of serious alarm. Faeculent eructation may precede this.

The third symptom is shock, which, to my mind, is of vast importance. I know that this sign is mentioned by every writer, but mostly under the heading of the constitutional signs, whereas I venture to think it should have a prominent place. The physiology and pathology of shock are not fully understood and probably more than one condition is included in that term. Whether, as has recently been suggested, it is due to stasis in the capillary circulation or to some chemical product, such as histamine, to permeability or to some upset in the stable equilibrium of the nerve centres, it is difficult to say. It seems to me that the nervous disturbance and consequent loss of energy or force has some claim in this particular disease. The nervous supply of the intestine must be considered. The drawings made by anatomists of the plexus of Auerbach between the muscles and of the plexus of Meissner under the mucous membrane are valuable guides. Gaskell's account of the sympathetic system may also be taken into consideration. He points out the receptors are sensory and the connector unites these with the excitor or motor nerves. The peculiarity of the connectors is that they can be distinquished by the large number of collaterals. They can, therefore, set at liberty a large amount of nerve force by a sort of trigger action. It is also stated by Gaskell that the connectors of the vagus reach right down to the plexuses of the intestine. It seems a reasonable deduction that if these nerves are excited by unusual stimuli, or are deprived of their oxygen supply, a very large amount of force or energy may be set at liberty and become lost to the system at large. The suddenness of the onset, as is seen in a crush of the testicle, seems more in accordance with a disturbance of nervous equilibrium than with circulatory or chemical causes. The condition of shock is familiar, but it is difficult to get a measure or standard that will show its intensity. I know of none, except the pulse. The almost similar condition of collapse is dismissed by some writers with the remark that it is soon recovered from. Binnie holds that nearly all cases of intestinal obstruction terminate in toxæmia. I think it would be useful if this term collapse were completely separated from the initial shock and reserved for the later form of shock and for toxic symptoms which inevitably appear if laparotomy is not performed, or if the patient, as is so usual, is not seen by the medical man until a few days after the first symptoms have appeared.

Crile's investigations into this matter seem of considerable importance. When a state of shock is induced in an animal, certain definite changes are found after death in the cerebellum and central nerve cells; these changes are always of a definite nature. Even

strong emotions, such as fear, have a similar effect of a well-defined and anatomical nature. This fact, together with the known effects of exhaustion in the nerve cells, point out to this particular form of shock as being nervous in origin. There is a further fact that, roughly, the further from the pelvis and the nearer the diaphragm, the greater is the shock produced to the nervous system. It is usually stated that the proximity to the great plexuses of the cœliac plexus is the cause of this. I have not been able to get any good account of the afferent nerves of the sympathetic system, but, however it is brought about, it must be the afferent nerves that go by the splanchnic and lumbar nerves to the ganglia on the posterior root and not the efferent or motor nerves that are stimulated, as the afferent are the receptors and, as far as I know, the cœliac ganglion is not looked upon as a centre. It is difficult to understand how the sympathetic ganglia directly are affected, although they may be indirectly affected, as they form part of the reflex nervous arc.

The fourth symptom is constipation and whether it is absolute or not I have found this sign very harassing, as it has been sometimes difficult to say whether it is or is not present. I think that after two or three copious enemata have been personally given and nothing has passed within two hours it may be taken as a practical rule, provided the other symptoms are in evidence, that it forms one of the four signs of intestinal obstruction.

These four symptoms—pain, vomiting, constipation and shock—I would call the general signs or marks of the condition called obstruction and I mean by this that they are common to all of them in some degree and that it is very seldom that any of them are absent. If any of the four be absent, some cause may or may not be found for the variation, but for practical purposes it may be assumed that they all exist. The special signs due to the various subdivisions are added to these and serve to differentiate them in many cases. These four signs also may be looked upon as variable factors, as they may each differ in degree, duration and order of occurrence. In one form of obstruction I have found it very difficult to be sure what really was the underlying difficulty and that is in cases of paralytic ileus, pseudo-strangulation or paralysis of the bowel. My difficulty was this: a patient, aged 46, was under my care for some time with tuberculosis of the lung. She had had nine children and was of a weakly disposition, was prone to vomiting, headache and constipation. She did well under treatment of a hygienic nature and was discharged. About a year later I was called in to find her vomiting and in pain. I ordered her into the hospital and on examination found no chest symptoms, but a swelling above Poupart's ligament and external to the spine of the pelvis. It was slightly tender on pressure, but appeared to be fixed and had not any lateral mobility. On squeezing it, no evidence of distinct pain was evinced. She told me the lump had been there for a week and she had not thought much about it, as she had had glandular enlargement of the neck. The pain had been severe at times before I saw her, but had not lasted long. There had been intervals of calm in between. She located the pain about the umbilicus, but was not intelligent, and it was difficult to get good answers. When I started to examine her, she vomited a bilious looking fluid. As I had seen her like this before, I did not pay much attention to her vomiting. This was my first mistake. I palpated the abdomen and could find no area of tenderness; percussion gave me no other information. No distension was present and she took a fair meal shortly after. There was no fever and during that day and part of the next she had pain, but not at all severe or of a paroxysmal nature. At one time she passed four hours without pain. There was no shock. The lump puzzled me and this was my second mistake. Looking back I am ashamed of my mistake, but I would point out again that it was above and not below Poupart's ligament. Constipation was habitual with her and we could not get a clear answer as to when her bowels had been opened. I ordered three copious enemata. These produced no result whatever, except to increase the pain, but even during the pains she seemed free when her attention was attracted. She then vomited and the vomit and eructation had a fæculent odour. Two hours later the vomit was decidedly fæculent. I took her down to the operating room and the Matron looked after the chloroform and I opened the abdomen over the swelling. On cutting the skin a mass about the size of a hen's egg, quite black, presented immediately under the skin, no superficial fat being encountered In the centre was some omentum easily recognized and gangrenous. I pulled the omentum through and cut it away and ligatured it. I then saw the mass was the right ovary, when I released the omentum. The mass rotated about two right angles and the infundibulum, ampulla and isthmus went back to their normal position. They were in quite good condition, but on incising the ovary it was found to be thrombotic and quite dead. I ligatured through healthy tissue and returned the stump into the abdomen. I saw the mass drop down through the opening and verified the fact that it was above Poupart's ligament; I stitched up the abdominal wound. Four hours after she had a good motion and recovered completely. I could not understand the twisting of the Fallopian tube round the ovary. It is a law of all involuntary muscle that when put upon the stretch, it contracts. The omentum with the ovary seems to have been pushed forward and outwards, the abdomen being very lax, to have found some weak or atrophied portion of the adminal muscle and to have formed the hernia. The Fallopian tube would be first stretched and possibly the longitudinal muscles in that organ contracting had compressed the ovary. The tension put on the omentum acting through the sympathetic had evidently paralysed the bowel, but I did not see it. It is usually stated that in squeezing the ovary pain is elicited, but in this case the organ being gangrenous would account for the absence of pain. Since then I have tried compressing the testicle in old men and found it sensitive, but in women about the menopause I have found pressure has not produced the pain I expected. As my own experience is limited, some others may be able to give correct information.

My next case was that of a woman admitted for

vomiting, pain and constipation. She was about five months pregnant and was suffering from excessive hydramnios. The abdomen was very tense and enlarged and did not admit of any fine palpation. She gave a short history of pain, not excessive, no shock whatever, but the vomit was fæculent. I ruptured the membrane and filled the table with amniotic fluid, thinking this would give relief, as I had made the diagnosis of obstruction from pressure. I sent her back to bed. She was no better next day and I opened her abdomen and found about a foot of paralysed bowel, but I had waited too long and she died that night.

The third patient was a man over 60 with no history of shock; on admission he had pain fæcal vomiting and intense collapse. I opened his abdomen and found about a foot of bowel contracted. I expressed the intestinal fluid through this as well as I could and closed up the wound, but he died a few hours after. This case happened some years ago and at that time a controversy was going on in the journals that the bowel should be incised and the fluid let out. Since then it has been ascertained that extract of healthy bowel after filtration when injected into animals does no harm, but a strangulated bowel treated in the same manner either killed the dogs which were injected, or made them seriously ill. Since then I have always evacuated the fluid. I would point out that in these three cases there was an absence of shock. Many cases have been described, where the symptoms could not be distinguished from acute obstruction. Another author speaks of it as painless obstruction, but most authorities seem agreed that shock may or may not be present and that pain is much less intense than in the other varieties. It is said nearly always to be caused by damage to some organ other than the bowel, such as a herniated ovary or a twisted ovarian pedicle. At any rate, it is supposed to be a reflex phenomenon and on this account should have a place of it own in a classification. Others hold that fæcal vomiting is an early phenomenon. I think in most cases there is other evidence besides the general symptoms which should in most cases give it a separate place.

I venture to suggest that the terms acute strangulation, chronic obstruction and paralysis of the bowel would draw the attention more to the essential factors in the disease, that the factor shock is intense in acute, much less decided in chronic obstruction and paralysis, that the pain is acute in strangulation and much less in the other two. Vomiting is projectile and forcible in strangulation, less so in the others. In strangulation the pain and vomiting are closer together; pain is continuous with paroxysmal bouts; in the remaining two forms it is delayed, while constipation is common to all except intussusception, where there is blood, etc..

The different varieties have special symptoms, as in volvulus, the early distension and other factors that complicate it. One patient fell down the hold of a ship and fractured his left femur. He was brought into hospital on the fourth day. He had vomiting, but he stated distinctly that his bowels had opened on the day of the accident. Enemata were given. He was very fat and distension took place early, but the fracture and supposed internal injuries put us off our guard. A consultation was held and we delayed till next day, when his breathing was so obstructed with the rapid distension that he died just before operation. I made a *post mortem* examination and found a volvulus of the sigmoid flexure. In gall stones the history is suggestive and a history of peritonitis would be special indications which might lead to a correct diagnosos in hernia. In intussusception there is the presence of a tumour. In cancer of the bowel there are special additional signs, such as alternate diarrhœa and constipation. These and many other special signs added to the general signs, would aid in distinguishing the cause.

I think our teachers made too light of the difficulty of eliciting the history, as teaching is second-hand knowledge and it is almost impossible to describe palpation or auscultation, which requires first-hand knowledge. The classification usually employed not being the best, leads us astray, owing to a strong desire to fit the disease into some known grouping. D'Arcy Power states that bad classification leads to bad diagnosis and the personal matter in the making of a good diagnosis requires a special aptitude for unravelling complex situations.

As regards treatment, if all four symptoms are present in any degree, taking the advantages with the disadvantages, the best interests of the patient are served by laparotomy, done as early as possible. Each surgeon seems to have his own particular method of operating. Beyond recalling that the caecum is the key of the situation, advocating with Greig Smith, a following up of the most distended and congested part of the coil and insisting on the fact that the collapsed bowel is nearly always in the pelvis, I have nothing to add. I have often been tempted to delay when it would have been better to act promptly. I admit that had my belief in the method been stronger and my ideas of the events more vivid and clearer, it might have pushed me into a more active attitude. I think this lesson has to be learnt and learnt thoroughly.

A METHOD OF SUSPENSION OF THE UTERUS.

By **William T. Chenhall, M.D., F.R.C.S.,**
Honorary Surgeon, The Royal Hospital for Women, Sydney.

I esteem the enquiry of many colleagues for the details of my method of suspending the uterus by its ligaments and have decided to publish them for general guidance. The operation has now been tested in many hundred cases and has proved a very satisfactory procedure. It is both easy and safe and affords a perfect opportunity not only for viewing and dealing with the pathological entities which present, but, also, for complete survey of the minor anatomical variations upon careful study of which the success of the operation itself must largely depend.

These variations chiefly involve the utero-vesical folds, the folds of the infundibulo-pelvic tissues and the utero-ovarian ligament.

It is impossible without an accurate study of these structures to select the correct point in the round

ligaments upon which the suture must be placed in order to elevate and to advance the uterus into its corrected position without causing undue tension on some structure. Yet, under full vision, this survey may be very rapidly made.

I believe the chief cause of post-operative pain in the Alexander-Adams operation, without inspection, and, therefore, without careful anatomical survey within the pelvis, arises—apart from continuance of of some pre-existent, undiscovered pathological entity —from undue tension upon some slightly aberrant anatomical structure within the pelvis.

In a long series of cases one observes especially the variations in the bands beneath the peritoneum in the utero-vesical folds. One cannot state precisely what is normal, but one finds in their presence a determining factor in aiding his decision upon the precise point in the round ligament, beneath which the suture must be placed. Two other factors are important. First, the length of the round ligament. In cases in which there have existed, during a long period, marked retroversion and *descensus* the ligaments are usually very long and lax.

It is not always easy to pick up such sagged ligaments without the use of forceps through a small abdominal incision, but I prefer in all cases to do so. The ligament should not be crushed and devitalized by any biting forceps.

The second factor is the thickness of the muscular layer of the rectus muscle, through which the ligament must be made to pass to its point of attachment to the sheath of the opposite muscle.

(1) The Incision.

The incision must be accurately made through the mid-line and must be of sufficient length to admit full inspection and careful handling of the pelvic organs by the gloved fingers.

Any associated lesion may thus be efficiently dealt with. Adhesions may be separated.

(2) Uterine Test.

Lift the uterus by placing the fingers beneath the fundus and observe the precise elevation to which it easily swings. Note the point in the incision which corresponds to the fundus of the uterus when thus advanced. This procedure will serve as a useful guide in deciding the level for the attachments of the uterine ligaments.

(3) Pelvic Survey.

Allow the uterus to fall back again. Survey rapidly all the structures, especially the utero-vesical and the infundibulo-vesical folds. Gauge as accurately as possible the length of the round ligament and whether the narrow fold between it and the uterine end of the Fallopian tube is normal or unduly narrowed. Upon these factors will depend your selection of the correct point beneath which the suture should be passed. Note particularly the condition of the veins in the infundibulo-pelvic fold, since it is clear that if enlarged, varicosed or bound by the existence of subperitoneal inflammatory thickening, tension will not be tolerated without a resultant excitation of pain and discomfort.

(4) No. 2 Chromic Gut Suture.

Thread 30 cm. of No. 2 chromic gut in a curved needle without a cutting edge. Pass the suture beneath the round ligament at the point selected, that is, about 3.75 cm. distant from the uterus. Grip the free ends, after release of the needle, in a small pair of Spencer Wells forceps. Repeat the process on the other ligament.

(5) Drawing out the Ligaments.

Grip the edge of the peritoneum on each side of the incision in a small pair of Spencer Wells forceps. This will ensure its being in the correct position for perforation and will guard against its being pushed off the abdominal wall during puncture. Select a small pair of curved Spencer Wells forceps. Insert them at the correct level, usually about 3.75 cm. above the pubis. Pass the left hand within the abdominal cavity and accurately define the body of the rectus muscle.

Guided by this hand, force the curved forceps laterally between the sheath of the muscle and the muscle itself until they pass a point immediately beyond its middle line. The convexity of the forceps should be in contact with the sheath. Direct the points of the forceps through the muscle, subperitoneal tissue and peritoneum by a clean direct push, the point being guarded by the fingers of the left hand within the abdomen. Open the blades just sufficiently widely to take up the two ends of the chromic suture of that side. Release the forceps originally holding the two ends. Withdraw the forceps. The suture and ligament will follow, the latter appearing at the edge of the rectus muscle. Examine the ligament with the fingers within the abdomen, lest some omentum or portion of the Fallopian tube be drawn along the path with the ligament. It could only happen through faulty technique.

Repeat the above procedure with the ligament of the other side.

Place both pairs of forceps in the hands of a reliable assistant, who will exercise just sufficient pull to keep the ligaments in view at the sides of the incision.

(6) The Abdominal Toilet and Closure of the Peritoneum.

Remove all pads. Bring down the omentum gently. Lay it as a fold, covering the intestines with its lower end resting behind the uterus. Satisfy yourself that the position of the uterus is correct. Close the peritoneum with No. 1 pain cutgut.

(7) Fixation of the Ligaments.

Select a curved needle. Thread the chromic suture of one side in it. Pick up with the needle the edge of the sheath of the rectus muscle of the opposite side. Grip the sheath with a pair of forceps. Pull it over towards the ligament and tie a reef knot. Care must be exercised so that the gut is not broken, since the ligament may slip away from view. Similarly, fix the ligament of the other side.

(8) Closure of the Incision.

I invariably close the sheath of the rectus muscle with No. 2 chromic gut, the fatty layer with No. 1 plain gut and the skin with horse hair, Chinese twist or a No. 0 chromic sub-cuticular suture. All these sutures are continuous.

No pessary will be required. The patient may be permitted to move freely in bed after a few days.

During the past fifteen years I have scarcely practised any other method. I was, early in gynæcological practice, led to adopt this operation for several reasons. Firtly, experience had clearly proved to me that the results of the Alexander-Adams operation were not satisfactory.

Secondly, Gilliam's method is, in my judgement, obviously defective in that the soft, yielding ligament is brought through the extremely dense unyielding sheath of the rectus muscle and that, therefore, the only portion of the ligament brought into service is the short length between the uterine horn and the sheath of the rectus muscle when the uterus is brought up to the corrected position. In the method which I have adopted the ligament passes through only soft, yielding tissues, which afford more freedom for the ligament and an increased length of ligamentary tissue for service.

This advantage has, I believe, been abundantly shown on the few occasions in which I have suspended the pregnant uterus in cases in which abortion had previously resulted from the faulty position of the uterus.

No surgeon, so far as I know, has previously ever deliberately attempted to suspend a pregnant uterus in this way.

In the first five cases the babies have been born and no trouble occurred during their birth. Post-partum examination, in each case, proved the uterus still in excellent position and the abdominal incision presenting an ordinary scar.

Yet, in one of these cases I released the uterus from adhesions and in other case I repaired a relaxed vaginal outlet and cervix. In two cases operated upon during this year recovery was perfectly normal and I await the report of their accouchements with confidence and hope.

I should not attempt the operation except in carefully selected cases. My chief objection would lie against conditions of marked obesity, which would necessitate a long incision in a wall probably itself deficient in muscular tone. I should first reduce the obesity.

I have assumed throughout this article that the pelvic floor is intact and normal, or that, being defective, it will be completely restored before the suspension itself is attempted. No surgeon of experience would attempt to do otherwise.

The detailed description I have given demands no apology, since success depends up a strict attention thereto.

Reports of Cases.

A LESION OF THE OPTIC THALAMUS.[1]

By **Arthur E. Mills, M.B. (Sydney),**
Honorary Physician, Royal Prince Alfred Hospital.

W.B., naval stoker, *æt.* 30, was admitted to the Royal Prince Alfred Hospital in May, 1919. He complained of "paralysis" of left side of two months duration. His family history was good.

[1] Notes read at a Clinical Meeting of the New South Wales Branch of the British Medical Association on August 8, 1919.

He was born in Victoria; he was on active service in the Mediterranean during the war. He has been a fairly heavy drinker.

He contracted syphilis seven years ago in Melbourne and was treated for 18 months. He received eight injections of mercury and two of salvarsan. He took pills for eighteen months. About seven years ago he also contracted gonorrhœa.

He enjoyed good health until March, 1919. Then, one day while sitting down at table, he felt a sudden pricking in his left foot and leg and almost immediately he became paralysed in the left leg and left arm and the left side of his face. The paralysis was not complete, for after a short time he was able, with assistance, to walk to his cabin.

On admission, some weeks after his stroke, he complained of weakness of the left arm, the left leg and the left side of the face and of a continuous, painful sensation in the arm and leg, as if they were being terribly gripped. He is a healthy looking man. Examinations at various times revealed the following signs and symptoms: There is slight paresis of the muscles of the left leg, left arm, left side of the face and the left side of the tongue.

The functional activity of the cranial nerves, except the seventh and twelfth, is unaffected.

The pupils react to light. The knee jerks and ankle jerks are active. The cremasteric reflexes are active. The abdominal reflexes are present, but those on the left side are greatly increased. The plantar reflex is the flexion type. The response is normal on the right side, but on the left side the response was a marked flexion of the toes, with violent and sudden withdrawal of the foot. This result followed each stimulus applied to the left sole. When the patient was asked for the cause of the sudden and violent movement, he answered: "The feeling produced by scratching the sole is horrible." "It is indescribable." "It is like electric shocks going through me." "I can't stand it." This excessive response, coupled with his statement, led me to make further and more detailed observations as to the extent of the disturbance of sensation. It then became apparent that irritation of any part of the skin of the left side of the body, or face, or limb, *e.g.,* stroking with the head of a pin, gently scratching with the finger nail, easy traction on the hairs of the limbs, of the body, of the eyebrow or the scalp, was very disagreeable to the patient, the patient's facial expression the while being that of one suffering great discomfort. While these tests were being made, the patient would wince and would ask us to desist, saying "the feeling induced is horrible." "I can't describe it." But a similar irritant stimulus applied to the right side of the body was not said to be disagreeable at all. Further, it was elicited that the unpleasant feeling was aroused when the patient grasped an object suddenly and without thought. Then he would often relax his grasp and let the object fall. Accidents such as these occurred more frequently during the early part of his illness. Now, realizing what may happen, he takes hold of things with more circumspection and with greater deliberation. He prepares himself, as it were, for the feeling which will follow and braces himself to withstand it.

When the left testis was gently squeezed the discomfort caused was said to be much greater than that caused by squeezing the right testis.

Here, then, we have exhibited all over the left side of the body "an over-response of affective stimuli," described by Head as the most characteristic sign of thalamic lesions (*Brain*, Vol. 40, pr. 2 and 3). Once this over-response was recognized, we realized that we had to do with a lesion of the optic thalamus. We proceeded then to investigate the disturbances of sensations present.

(1) *The sense of passive movement and passive position.*—This, as has been frequently noticed by other observers, is greatly disturbed. The tests were chiefly applied to the fingers and toes, but the other joints showed a marked disturbance.

In the fingers, where it can be the more readily estimated, it was noticed that not all the fingers were equally affected, but that the little and ring fingers showed the greatest loss.

This sense of passive movement is an extraordinary delicate one. The slightest movement of the fingers is appreciated by the normal individual. And this was the case with the fingers of the right hand of our patient. But in the case of the fingers of the left hand, no movements and con-

sequently no change in position were recognized until the little and ring fingers were flexed at an angle of 45° or extended 30°, the mid finger flexed 30° and extended 10°, the first finger flexed to 15° or extended 10°; the thumb flexed 10° or extended 5°. For these observations the hand and fingers were supported on a pillow, pronated while the fingers were being extended and supinated while they were being flexed.

Tactile sensation, as estimated by a wisp of cotton wool, was appreciated on the left hand, but the same stimulus was felt more plainly on the right hand. On the left side of the face the stimulus by cotton wool was well appreciated, but the patient volunteered the remark: "The sensation is duller on the left side than on the right, but it is very unpleasant—like a mild electric shock." If the wisp of wool was drawn across the face from the right to the left side, as soon as the mid-line was crossed the patient winced and withdrew his head slightly.

(2) *Location of spot touched.*—The patient was able to locate the spot touched with considerable accuracy. The only difference noted was that he, as it were, at times felt about for the part touched.

(3) *The compass test.*—There was slight disturbance of this sense of appreciating two points applied simultaneously to the left hand and arm. To ensure correct answers the points of the compass had to be a little more widely separated; then his answers were invariably correct.

(4) *Sensation to heat and cold.*—There was not any very great disturbance of this aspect of sensation. It was noted, however, that the responses were slower on the left side than on the right. It seemed as if the application of the warm or cold tube had to be maintained for an appreciable period before the patient recognized the difference. Then his answers were, in the main, correct. But he maintained that when he did appreciate the warm test tube, it felt warmer than on the other, the sound, side.

(5) *Sensation of painful stimuli.*—This was estimated by pricking with a pin. The responses on the left side were variable. This variability of the responses was due to the mildness or severity of the prick. It was found that the answers were correct on the right hand whether the prick was light or severe. In the case of the left hand with a light prick the patient recognized the contact, but could not say whether it was the point or the head of the pin. More incorrect answers were noted in the little, ring and middle fingers, where with 12 light pricks from 3 to 5 responses were right. With the first finger of 9 light pricks 5 correct answers were given. With deeper pricks the results were much better; fewer mistakes were made. For example, in the case of the ring finger 6 light pricks were only recognized as contact or pressure; with slightly heavier pricks all were recognized as painful pricks. But in the corresponding fingers of the right hand both light and heavy pricks were correctly appreciated.

(6) *Appreciation of weight.*—With his left hand supported on a pillow, weights of 10, 20 and 50 grammes were applied. The patient was not allowed to move his hand or fingers from its support, as it were, to weigh the weight. It was found that in the case of the little finger he could not distinguish between 20 and 50 gramme weights. Over the other fingers he appreciated lesser differences more correctly; half the answers were correct when he was asked to tell which was the heavier or lighter when 10 and 20 gramme weights were applied. Over the right hand the difference between 10 and 20 gramme weights was readily recognized. If the patient were allowed to weigh the object the answers were more accurate.

(7) *Appreciation of texture.*—The patient, while readily recognizing the difference between pieces of cotton, silk and woollen fabrics when these were rubbed across the fingers of the right hand, was quite unable to appreciate any difference when these fabrics were applied to the fingers of the left hand.

(8) *Appreciation of size and form.*—This aspect of sensation was greatly disturbed on the affected side. When a coin, or a key, or a knife, was placed in his hand, his eyes being shut, he could not distinguish the nature of the object. In no case did he give a correct answer.

In some of the cases described by Head the over-response to affective stimuli was evidenced by the effect of sounds, whether pleasant or unpleasant. Our patient was asked whether he had noticed anything since his illness with regard to sounds. At once he replied: "Noises are very disagreeable to me now. The noises of the trams worry me quite a lot." Thinking perchance that his sense of taste might show some disturbance, we applied quinine and acid to each side of his tongue. On the right side the sensation was normal. On the left side, sourness or bitterness was more quickly and more intensely appreciated.

With regard to motor disturbances, other than the paresis already mentioned, it was noticed that there were definite and continuous slight athetoid movements of the fingers and toes while the hands and feet were at rest.

There was also evidence of slight inco-ordination of the left hand, arm and leg in movements requiring harmonious action of many muscle groups. There was no Rombergism.

A feature present in our case, though not, as far as I am aware, mentioned by other observers, was that of hypotonus. This was very marked in the fingers and wrists and toes. Compared with the right side it was clearly seen that the fingers of the left hand could be extended to a much greater extent. The left little and ring fingers could be easily extended to an angle of 120°, while the fingers of the right hand could not be extended more than 60°. The left wrist, too, was easily over-extended. The difference in extent of movement when the same pressure was applied to corresponding fingers of the two hands was very noticeable. In fact, one could definitely say the fingers and wrist of the left hand were capable of marked hyper-extension; the laxity of the structures supporting the joints was readily apparent to the observer's hand when causing the extension.

This case presents those features which Roussy (quoted by Ferrier in "System of Medicine," Allbutt and Rollerton, Vol. VIII.) has described under the name of "thalamic syndrome," *viz.* (1) slight hemiparesis without rigidity and regressive; (2) hemianæsthesia, the anæsthesia especially evident in the great disturbance of passive position and movement; (3) astereognosis and slight inco-ordination; (4) severe and persistent pain in the hemiplegic side; (5) hemiathetosis. In addition to these signs, which Roussy holds are sufficient to justify a diagnosis of a lesion of the optic thalamus, there is "that over-response to affective stimuli," which Head states was present in 20 out of 22 cases observed by him. It is the sign which, when present, suggests an affection of the optic thalamus. It may not always be present, for if the lesion be so extensive as to destroy the thalamus, there will be a complete abolition of sensation of the opposite side of the body, even as there is where the fillet is destroyed before entering the thalamus.

For its explanation I would refer my readers to the article by Head in *Brain* (Vol. 40, pts. 2 and 3). This over-response was manifest in the effect of noises on the patient and the effect of his taste of bitter and sour solutions.

The sudden onset of the disorder arising in a young and apparently healthy man previously infected with syphilis, is doubtless due to thrombosis of a vessel, the seat of syphilitic endarteritis leading to softening.

That the syphilitic virus was still active was shown by the fact that the Wassermann reaction of his blood was + + +.

He was again subjected to vigorous treatment and when he left hospital his disagreeable subjective sensations, though he declared that they were less marked than when admitted, were still present. Despite this statement, we could not observe any improvement in the various disturbances of sensation that we have already described. Doubtless his hemiparesis had improved, but hemiparesis, as will readily be recognized, is due to a coincident disturbance of the adjacent motor fibres of the capsule and is not an essential feature of the thalamic syndrome.

Recent investigation has shown that the "superb lily," *Gloriosa superba*, contains the alkaloid, colchicine, in sufficient quantities to endow the plant with poisonous qualities. Colchicine had previously been known only as the active principle of *Colchicum*. The amount of colchicine in the tubers of *Gloriosa superba* has been estimated as 0.3% by the method official in the United States Pharmacopœia. Physiological tests show that this alkaloid is identical in its action with that from *Colchicum autumnale*.

We regret to learn that Dr. Joseph Henry Little died at his residence, Greengate Road, Killara, on October 29, 1919.

The Medical Journal of Australia.

SATURDAY, NOVEMBER 8, 1919.

The Records of Great Deeds.

The Australian War Records Section is on its way home. Within a short time all the valuable material that has been collected, will be transferred to the new headquarters in Australia. The staff of the main military part of the records, under the direction of Mr. C. E. W. Bean, the official Australian historian of the war, has already been established on this side. Other sections are following and among these is that of the medical records. We have referred from time to time to the work that is being undertaken by the Medical Collator, Colonel A. Graham Butler, D.S.O.. For over two years he has been collecting the war diaries of the regimental medical officers, the hospital records, the personal accounts of medical officers of the many units of the Army, the details of medical work in the firing line, behind the line, at the base and elsewhere, in addition to the records of the nurses in the casualty clearing stations and hospitals. There has been great difficulty in securing the records of events of 1914, 1915 and the first half of 1916. The diaries of the later period, and especially for the years 1917 and 1918, are excellent and almost complete. In the earlier stages of the war, the medical officers were unaware of the importance of keeping accurate entries of their experiences on the field. Later, when fresh excitement and soul-stirring occurrences dimmed the memory of what had taken place before, they felt the task of reconstructing the scenes they had witnessed, the activities they had displayed and the methods they had employed, too great to attempt. It would be impossible to rely on a single man's recollected recital of these distant events, for in addition to the strain placed on the memory, there is the fact that many of the medical officers attacked their work without an effort to preserve a consecutive mental picture of what was happening in their immediate environment. On the other hand, single events have lived in the minds of many men and, even if some of the details have been lost, the recording of these events is important. Corroboration and amplification can be sought when a starting point is given. A somewhat disconnected account of the working of the medical units is better than no information at all. It is with the object of having the real story of the organization, equipment, working and experience of the Australian Army Medical Corps and of each of its members, that these early records are sought. There is another service that regimental medical officers, medical officers of field ambulances and casualty clearing stations and field sanitary officers can perform. The men who have served in the great battles, have seen the operations from a special and peculiar aspect. A full, unreserved account of their impressions of the battles and of the medical work associated with them would be of enthralling interest. Very few of these impressions have been obtained. It is not improbable that many men have essayed to write them and have found the task difficult. For anyone unaccustomed to descriptive writing, the attempt would no doubt fail to satisfy the writer and he would be inclined to leave it unfinished, because of the defects in expression. This attitude is unfortunate. The collators do not seek fine literary achievement from the regimental medical officers. Their achievements were magnificent in another direction. The crudest collection of scrappy sentences, provided that they convey the general ideas of the writer, can be used almost as well as a polished dissertation of the exciting experiences of a medical officer in battle. Moreover, medical officers will have information of unspeakable value to give of those great colleagues who are no longer here to tell their story. Every act in the war is worthy of record; every minute contained something of value for the history that must be written. We appeal to the large-minded generosity of the men who have served, to rack their brains and to add something to the material for this great history.

Although the first volumes of the medical histories of the war have been completed both in Great Britain and in Canada, things are not far advanced in Australia. The work of collating, abstracting and arranging has been done in a most excellent manner as far as the material available admitted; much still remains to be collected.

At this stage the medical profession will wish to know what will be done with these records when they are completed. This is a matter of vital concern to them. We understand that the Federal authority has not yet arrived at a definite decision. It is unfortunate that it may be necessary to exercise economy in view of the great financial obligations of the Commonwealth. There can be no second opinion concerning the desirability of the publication of a popular history of the Australian Army Medical Service during the war period. This history written in the form of a narrative, would appeal to every medical practitioner and should be regarded as a peculiarly suitable memorial to the brave medical officers who have fallen. The copies of this work would be cherished by every doctor in the land and each succeeding generation of medical practitioners would look upon the book handed to them by their fathers, grandfathers or great-grandfathers as irreplaceable treasures. A popular history must be written.

In the next place there should be a technical medical history of the war. The collators have collected a great mass of technical information of the utmost value. The data should be available for reference and for future investigations into the ætiology, pathology, course and treatment of war conditions, diseases and injuries. The adequate and efficient arrangement of the data means the work of many years. No one can foretell to what valuable uses this information may be put, nor what the records may lead to when followed up and amplified in the light of extended experience. It is therefore essential that the strictly technical data should be handled in a proper manner, even if this should entail the outlay of a very considerable sum of money and the expenditure of energy by expert workers for a series of years.

In the last place there is the medico-military aspect of the records. That a history written from this point of view would be of national importance, no one will deny. The Australian Army Medical Corps is to be remodelled and re-organized. It will be the duty of the medical profession to watch its future development and to guarantee that it is kept at a high standard of efficiency. And when the world has to face a new war, there may be no more unpreparedness. The experience of the great war of 1914-1918 must be available. The history of the achievements, the defects, the difficulties and the failures, the scope and the limitations of the Army Medical Corps must form the foundation for future work in warfare.

THE SENATE OF SYDNEY UNIVERSITY.

The election of ten persons to represent the graduates upon the Senate of the University of Sydney will take place next Monday, November 10, 1919. Nine of the retiring members are standing for re-election. Twelve new candidates are contesting seats. It is conceded on every side that the retiring members of the Senate have performed the duties of their position with advantage to the University. Most of them have held office for many years. There is, however, a general concensus of opinion that some representatives more closely in sympathy with the majority of the graduates, should be introduced into the Senate. A new era is dawning on this world. Statesmen of many nations have acknowledged that the whole of the people have rights to be considered in the settlement of national affairs. The University of Sydney has the opportunity and the privilege of providing the youth of New South Wales with education and with knowledge for the work of social, political and economic reconstruction. Thirty years ago the generous benefaction of John Henry Challis enabled the University to become the useful institution that we have known of recent years. To-day the princely gift of the late Sir Samuel McCaughey awaits its application to the domains of training and of learning. There has never been a time in the history of the University of Sydney when wisdom and diligence have been more required in shaping its destiny. The Senate needs those possessed of sufficient leisure and industry to make themselves familiar with the conditions within the University and endowed with that liberal spirit which sympathises with the earnest wishes of all seeking higher education.

Of the retiring members Dr. Cecil Purser will receive the support of every graduate familiar with his untiring service for the advancement of the University. Three other medical candidates seek election. Two of them, Dr. G. H. Abbott and Dr. C. B. Blackburn, have been chosen by the votes of many medical graduates from seven medical practitioners. Dr. Constance D'Arcy has been proposed as a representa-

tive of the women graduates of the University. While these medical practitioners have special knowledge of the opinions of medical graduates, they offer themselves as representatives of the whole graduate body. Equipped with a scientific training and brought daily into contact with the results of applied science, they are fully conscious of the necessity for bringing present education more closely into association with the spirit of systematic investigation and scientific research.

We urge every elector to support these candidates, not only on account of their special fitness to advise as to the future of the Medical School, the fourth largest in the British Empire, but also because they are representative of the graduates of the University of Sydney by birth, by long association and by sharing similar aspirations and ideals.

GERMICIDAL ACTIVITY OF EUCALYPTUS OILS.

Trees of the genus *Eucalyptus* are spread throughout the continent of Australia. A traveller may make a journey from Cape Otway in the south to Cape York in the north, or from Cape Leeuwin in the west to Cape Byron in the east without losing sight of the evergreen foliage of the gum trees. The leaves of these myrtaceous plants bear oil glands. By distillation with steam an oil can be obtained from most species. The amount of the volatile oil which may be procured in this way, varies greatly with the different species of eucalyptus. The researches of R. T. Baker and H. G. Smith, of the Technological Museum, Sydney, have yielded much information about these valuable products. The co-operation of an expert and enthusiastic botanist with a skilful and alert chemist has given special worth to these investigations. By ensuring that each sample of oil represents the result of distillation from the material derived from a single species, these workers have been able to demonstrate that the oil from each species is distinct and characteristic for each species. If a sample of oil is examined, the species from which it has been procured can be identified. The oils belong to several distinct series. In some the principal ingredient is cineol, in others phellandrene, in others pinene and in others an ester, such as geraniol acetate.

An extensive study[1] of the germicidal action of some of these oils has been undertaken by R. Greig Smith, D.Sc., Macleay Bacteriologist to the Linnean Society of New South Wales. He has examined the action of some of these oils when diluted with a neutral oil and in aqueous liquids. He has compared the disinfecting power of these substances with phenol, using *Bacillus coli communis* as the microbe. The constituent of chief importance in the medicinal eucalyptus oils is cineol. Samples of cineol, which had been obtained from the oils of *Eucalyptus siderozylon* and *E. polybractea* by freezing them, have been employed to determine the phenol coefficient of this constituent when diluted with water. The germicidal activity has been determined against phenol by ascertaining the dilution which destroyed the colon bacilli in a particular time. The comparison has been made for periods of exposure from one minute to four hours. The coefficiency curve of cineol reaches a maximum of 3.4 in thirty minutes and falls slowly to 2.8 in four hours. Although cineol is more powerful than phenol as a disinfectant, it is slower in its action and overtakes the more quickly active phenol at the end of five minutes with a dilution in each case of one to seventy-five of water. Three specimens of the oil from *E. cinerea* have been examined in acqueous dilution. A crude oil has less action than cineol, but rectified oil is more powerfully germicidal. The older and more acid the oil, the higher appears to be the phenol coefficient. Such an oil contains mainly cineol and pinene. The oils of the peppermint series are represented by the oil of *E. australiana*, which contains 70% cineol, along with a little piperitone, phellandrene, ester and alcohol. These oils are slightly more active than cineol during long exposures. The oil from *E. dives*, which consists mainly of phellandrene with a little piperitone, is more active than those containing cineol. The oil from *E. polybractea*, which is much used for medicinal purposes, contains more than 70% cineol, along with pinene and aromadendrol, an aldehyde. It is more rapidly germicidal than pure cineol.

Some examination has been made of the germicidal power of the other constituents of the eucalyptus oils when diluted with water. The pinene and the sesquiterpene have low coefficients. Piperitone is slightly more active than cineol. Phellandrene is more active again, but aromadendral has a very high germicidal activity. The germicidal power of aromadendral is twenty times that of phenol in exposures of one hour. It is the most powerful disinfectant yet discovered among the constituents of these oils.

When diluted with neutral oils these eucalyptus oils have little germicidal activity. The phenol coefficients range from 0.4 with the oils distilled from *Eucalyptus cinerea*, *E. linearis* and *E. australiana* to 0.07 for cineol and the oil of *E. polybractea*.

When these oils are diluted with water they become opalescent. After some time the oil dissolves in the water and the solution becomes transparent. It is, however, well known that emulsions are more effective in destroying germs than solutions. An emulsion of cineol is more potent than the solution which is ultimately formed. There do not appear to be any objections to using these oils as disinfectants in the form of emulsions, but the difficulty of preparation of the emulsions will militate against the popular use of these oils. As sprays they may find a wider application.

In the course of these investigations, Dr. Greig Smith has made some interesting observations on the variation in resistance among different races of colon bacilli. By isolating a number of races of bacilli from the stock culture, he has found that the progeny of each of these colonies showed a wide range of resistance. This observation shows that a stock culture should be used for the measurement of the germicidal activity of different substances and that there should be some standard of resistance.

[1] *Proc. Linnean Soc., N.S.W.*, Vol. XLIV., p. 311, October, 1919.

Abstracts from Current Medical Literature.

THERAPEUTICS.

(162) Metabolism of Tyrosine.

C. P. Sherwin (*Proc. Soc. Exper. Biol. and Medicine*, October 16, 1918) has fed a monkey with para-hydroxy-benzoic acid in doses of one, two and three grammes. The urine has been collected for thirty-six hours after each administration and has been evaporated and treated by extraction. The urine has been found in every case to contain only the uncombined acid. None of the acid has been united to glycuronic acid or to sulphuric acid. This result agrees with the findings of other research workers who have administered this acid to several of the domestic animals. This author has recovered between 50% and 60% of the dose in the urine. Another monkey has received para-hydroxy-phenylacetic acid in doses of one and two grammes. Approximately 60% of each dose has been recovered in the urine. Some of this acid has existed in the free state, while the remainder has been excreted in combination with glycocoll as para-hydroxy-phenaceturic acid. As this latter body has only been found previously on one occasion according to the literature, particular care has been devoted to its identification. The melting point, which is 154.7° C., is two degrees higher than the melting point cited in previous publications. The acid is comparatively soluble in alcohol, ethyl acetate and warm water, but is insoluble in ether, benzene and cold water. On boiling it with concentrated hydrochloric acid, the acid splits up into its two components, para-hydroxy-phenylacetic acid and glycocoll. Analysis of the compound yields results agreeing with the calculated value for carbon, hydrogen and nitrogen. The author considers that the process of metabolism in the monkey in regard to para-hydroxy-benzoic acid and para-hydroxy-phenylacetic acid is comparable to that found in the lower animals, but unlike that met with in man. In man para-hydroxy-benzoic acid unites with glycocoll to be excreted as para-hydroxy-hippuric acid, while the acid after ingestion is excreted free in the urine among the lower animals. On the contrary para-hydroxy-phenylacetic acid is found free in the urine of man, but is united with glycocoll in the urine of the lower animals.

(163) Constituents of Daviesia Latifolia.

F. B. Power and A. H. Salway (*Trans. Chemical Soc.*, December, 1914) have separated and identified the constituents of the leaves and stems of *Daviesia latifolia*. This plant is a shrub that attains a height of 60 to 90 cm.. It grows in the south-eastern part of Australia and is generally found on small mountain ridges. In the country districts it is often known as the "native hop bush," a name which is supposed to have been given on account of the bitter taste of the leaves, which resembles that of the hop, *Humulus lupulus*. An infusion of the leaves is held to be of value as a tonic, a diuretic and a hepatic stimulant. It is said to be used as a remedy for hydatids and for low fevers. In 1898 J. Bosisto obtained a bitter crystalline substance from the leaves. The authors have shown that this body is contained in the leaves and stems of *Daviesia latifolia* and is a dibenzoyl derivative of a new disaccharide containing both dextrose and xylose. This compound has been named dibenzoylglucoxylose. An alcoholic extract of the material yields upon distillation a pale yellow essential oil possessed of a pleasant aromatic odour. This oil slowly deposits crystals of benzoic acid. From the portion of the alcoholic extract which was soluble in water, the authors have isolated benzoic, salicylic, para-coumaric and fumaric acids; a quercetin glucoside, probably rutin; the crystalline derivative of the new disaccharide and a quantity of sugar. From the portion of the alcoholic extract insoluble in water a quantity of resinous material has been obtained. From the resinous mass the authors have isolated myricyl alcohol, hentriacontane, a phytosterol and a mixture of fatty acids consisting of palmitic, stearic and linolic acids. The bitterness of the leaves is due to the crystalline substance designated as dibenzoylglucoxylose which is present to slightly more than one half per cent..

(164) Pneumococcal Meningitis Treated by Antiserum.

L. Litchfield (*Journ. Amer. Med. Association*, May 10, 1919) has reported the results of treating ten patients, suffering from meningitis produced by pneumococci, with the antiserum prepared by Preston Kyes. Meningitis caused by pneumococci may develope in the course of lobar pneumonia or broncho-pneumonia. It may appear after the usual onset of a pneumonia or it may precede the pulmonary lesion. Occasionally it occurs during convalescence. The records that have been published, show that patients have rarely recovered when the diagnosis has been confirmed by bacteriological examination of the cerebro-spinal fluid. The patients in this series were inmates of Camp Grant. An epidemic of influenza commenced on September 19, 1918. There were 10,000 cases, with 2,700 cases of pneumonia, in the next eight weeks. About one month after the onset of the epidemic the cases of pneumococcal meningitis made their appearance. They occurred at the end of the first week of illness, when pulmonary lesions had developed. The meningeal condition was diagnosed on clinical grounds and the diagnosis confirmed by microscopical examination of the cerebro-spinal fluid. Cultures of pneumococci were obtained from the spinal fluid in all the patients of this series. Of the ten patients five recovered and five died. As far as the meningitis was concerned, there was no difference clinically between the state of the patients who died and the condition in those who recovered. Some of the patients who exhibited the most intense symptoms of meningitis, recovered. Histories are given of the patients who recovered under the treatment. A typical history shows that the patient became ill on October 10, 1918. On October 15 the diagnosis of pneumonia with pleurisy in the right lower lobe was made. On October 21 the neck was stiff, the pupils were contracted and stiff and the patient was semi-comatose. A report from the laboratory on the cerebro-spinal fluid showed 40 leucocytes per c.cm. and a few Gram-positive lancet-shaped diplococci. Cultivation revealed pneumococci in pure culture. Four doses of 5 c.cm. of the antiserum were given by intraspinal injection and 5 c.cm. of the antiserum were given twice daily intravenously. Improvement occurred in 48 hours. On December 1, the eye grounds and reflexes appeared normal. Some of the other patients received larger quantities of the antiserum. All the patients were treated in the open air. They received the usual routine treatment with digitalis and, when necessary, with morphine, bromides, atropine, epinephrine and caffeine.

(165) Viburnum Prunifolium.

B. H. Hager and F. C. Becht (*Journ. Pharm. and Exper. Therapeutics*, April, 1919) have studied the action of alcoholic extracts of *Viburnum prunifolium* on the uterine muscle of dogs, cats, rabbits and guinea pigs. Both pregnant and non-pregnant animals were used. In some experiments strips of the uterus were employed and kept in Tyrode's solution at a constant temperature. In others the organ was tested *in situ*. In all cases graphic records of the contractions of the musculature were taken. Control experiments were conducted with alcohol of the same strength as the extracts. In some instances the viburnum was applied intravenously, while in others it was given through the intestine. From these experiments it is seen that the drug does not act as a uterine sedative. In 57.8% of cases the contractions were increased, in 26.3% they were decreased and in 15.7% they were unchanged. The amplitude of the contractions was increased, decreased and unchanged in almost equal numbers. Similarily, the tone of the uterine muscle was increased somewhat more frequently than the reverse. The authors are inclined to attribute these irregular results rather to the necessary manipulations than to any action of the drug.

(166) Constituents of Solanum Angustifolium.

F. Tutin and H. W. B. Clewer (*Trans. Chemical Soc.*, December, 1914) have examined the constituents of *Solanum angustifolium*, a plant which has been used in South America in the treatment of malaria and enteric fever. The material has consisted of the leaves, twigs and flowers of the plant. This material has been ground and extracted with hot alcohol. The resulting extract has been distilled in a current of steam. From the portion of the extract soluble in water the investigators have separated quercetin, rutin,

asparagin and a new gluco-alkaloid solangustine. On hydrolysis solangustine yields one molecule of dextrose. From the portion of the extract insoluble in water the authors have obtained triacontane, phytosterol, phytosterolin and fatty acids. A physiological study of solangustine yielded no facts of interest.

UROLOGY.

(167) Ureteral Calculi.

D. N. Eisendrath discusses in detail the indications for operation of ureteral calculi (*Annals Surg.*, August, 1919). He points out that a correct diagnosis can only be arrived at when the modern methods are employed and when the surgeon is aware of the common sequelæ of this condition. When the stone is in the ureter there may be uniform dilatation above it, stricture at the point of impaction and peri-ureteral abscess. When the stone is in the kidney there may be pyelonephritis, infected or non-infected hydro-nephrosis, peri-nephritic abscess, calculous anuria or generalized sepsis. The author discusses the actual difficulties encountered in practice and the methods for arriving at a correct diagnosis, in order that the proper treatment may be instituted. He claims that operative interference is required when colic recurs or infection persists after repeated attempts have been made to deliver the calculus by non-operative means. These measures include re-injection of a 2% papaverin solution, the injection of 30 c.cm. of albolene, glycerine or olive oil, the use of Lespinasse laminaria tents or the mechanical removal by Bransford Lewis's or similar dilators and forceps. The indication becomes more urgent if it be found that the calculus does not change its situation as a result of these endeavours. He cites illustrative cases to demonstrate the need of an operation when signs of stricture formation follow the spontaneous expulsion of the calculus or the operation of ureterotomy. Fistulæ, too, call for operation when they result from the perforation of the ureteral wall by a migrating calculus or when they occur above the site of stricture. He performs ureterotomy in the treatment of severe renal infections depending on an impacted calculus and is always prepared to remove the kidney, if the destructive changes render this course advisable. He shows that it is absolutely essential to operate in cases of calculus anuria as soon as the site of the impacted calculus can be localized. The surgeon should take advantage of the fact that the average period of tolerance in calculus anuria is six days. He recommends operation for hydro-nephrosis, even without infection. It is of considerable value to have recourse to pyelography before operation. In some cases it is necessary to operate after an attempt has been made to save an infected kidney. Caulk's methods of catheter drainage or renal pelvic lavage are often useful in this condition. When calculi are found to be present on both sides, the kidney with the acute complication should be operated on first. When no acute complication exists, the operation should be performed on the kidney with the better function. The second kidney can be dealt with at a later period. On rare occasions a simultaneous operation on both kidneys is deemed advisable.

(168) Primary Renal Tuberculosis.

In discussing the difficulties in the diagnosis and treatment of unilateral renal tuberculosis, Leon Herman employs the term primary to signify the first appearance of tuberculosis in the uro-genital system (*Annals Surg.*, August, 1919). As a rule, tubercle bacilli find primary lodgment either in the kidney or in the globus major of the epididymis. The soil in both situations is favourable and it is usually possible to form a correct diagnosis before the disease has extended far from the primary focus. In many cases the infection appears simultaneously in the male genital and urinary system. Herman states that the prognosis in tuberculosis of the uro-genital system depends on the degree of limitation in the structures primarily involved. In primary renal tuberculosis the glomeruli close to the medulla are usually attacked first. The disease may remain localized to this area for a considerable time, but ultimately it will spread in the majority of cases to the bladder and thence to the other kidney. The prognosis is good if treatment is instituted while the disease is limited to the kidney, whereas it is very bad when there is vesical involvment. All surgeons are agreed that nephrectomy should be performed as soon as the diganosis of unilateral renal tuberculosis is established. There is, however, difference of opinion concerning the proper method of dealing with the ureter. The author holds the opinion that it is less unfortunate to remove the ureter unnecessarily than to leave it behind when it is involved in the diseased process. The Mayo brothers hold that less than 5% of ureters in tuberculosis of the kidney require removal. Enlarged pipe-stem ureters with eccentrically hypertrophied walls are usually not removed unless they are infected. The author holds that when there is a large lumen in free communication with the bladder through a so-called golf-hole ureteral meatus, they should be removed. Rigid ureters associated with normal ureterovesical valves may be left with safety, if no infection is present. When the kidney is not functionally active and the ureter has been closed as a result of inflammatory changes, the kidney may be removed and the ureter left. In the presence of large peri-renal collections, it is probably wiser not to disturb the ureters if it can be shown that it is undergoing a process of inflammatory obliteration. When persistent sinus formation follows nephrectomy or when the bladder is infected from a retained segment of the ureter, the ureter should be removed. Herman gives the indications as follows. When there is stricture of the ureter below and dilatation above and the tube is secondarily infected; when the ureter is dilated, infected and in free communication with the bladder; when the ureter is enlarged, soft and diffusely involved in a sub-acute miliary tuberculous process. An early tubercular lesion in the kidney may be overlooked in the presence of a more obvious non-tubercular lesion of its fellow. In conclusion, the author gives the clinical history of a case of either primary vesical tuberculosis, an extremely rare condition or of masked localized renal tuberculosis associated with a more extensive lesion in the bladder.

(169) Two Renal Affections.

L. Buerger (*Urolog. Cutan. Review*, September, 1919) records two interesting cases of a tubercular infection of a horse-shoe kidney. The first patient was suffering from chronic cystitis with a vesical calculus. The stone was removed, but at a later date the patient had an attack suggestive of pyelonephritis. Two months later there was fever, pyuria, no renal tenderness and severe general illness. A cystoscopic examination revealed two ureters on the left side. The right kidney was functionating normally, although its urine contained a trace of albumen, while the left kidney had two pelves, the upper one being obviously infected. An operation was undertaken and it was found that the left kidney was intensely inflamed. It was enveloped in peri-renal adipose tissue. The second case recorded was that of a woman, aged 29, who complained of pain in the left lumbar region of three months' duration. The right kidney was found to be easily palpable. The urine was amber coloured, turbid and contained albumin and pus. No tubercle bacilli could be found. The function of the left kidney was proved to be normal. A skiagram revealed an indefinite shadow in the region of the right kidney, suggestive of enlargement. A small shadow in the pelvis, which was probably a calculus, and another small shadow in the upper renal region which was regarded as a calcified gland. The patient refused to submit to operation because she felt the pain on the left side. Five months later she returned for relief of her symptoms. There had been a considerable loss of weight and the renal tumour had increased in size. By cystoscopy it was discovered that the right half of the trigone, the right ureteral orifice and and the right para-trigonal zone were inflamed. Flakes of fibrino-purulent exudation were adherent to the ureteral orifice. It was held to be probable that the renal tumour was a tubercular one and an operation was performed for its removal. At the operation it was found that there was a horse-shoe kidney and that the lesion was limited to the right half. On separating the organ posterially, some thick, greenish-cheesy pus escaped through a rent. A large lymphatic gland in an advanced state of tubercular disintegration, was discovered. The upper two-thirds of the right half were removed and the patient made an uneventful recovery.

THE RATTEN INQUIRY.

We reproduce below *in extenso* an article which appeared in the *Journal of the American Medical Association* of August 2, 1919. The alleged diploma and the news item from the *Chicago Sunday Tribune have been reproduced photographically* from the pages of our excellent contemporary and we have followed the type copy as accurately as is possible.

A BOGUS MEDICAL DIPLOMA IN AUSTRALIA.

The information collected at the headquarters of the American Medical Association regarding medical colleges and the medical profession is now sufficiently complete to prevent the issuing of bogus medical diplomas without an early discovery. Through this information the fraudulent nature of some diplomas issued years ago is being brought to light. For example, the following report gives an account of a diploma which appears to have been issued illegally twelve years ago to an individual now residing at Hobart, Tasmania. Thus the information collected by the American Medical Association is rendering a service to other countries as well as to the United States.

In June, 1917, a letter was received from Mr. Arthur E. Hayward, Secretary of the Tasmania Branch of the British Medical Association, Hobart, asking in regard to the legal status of the Harvey Medical College of Chicago, and the character of the medical training given in it. The reply was that the college named became extinct in 1903.

In a second letter, received in September, 1917, Mr. Hayward asked whether anyone could have received a degree from the Harvey Medical College in 1907, and requested some legal declaration to prove that no degrees had been issued by that college after 1905. In reply, a certified copy of a resolution which appeared as an insert in the annual announcement of the Jenner Medical College, Chicago, issued in 1905, was sent showing, that after the organization of a "Harvey-Jenner Medical University," the Harvey Medical College affiliated itself with, and requested its remaining students to enrol for the session of 1905-1906 in, the Jenner Medical College. Sept. 7, 1917, we wrote to the secretary of state of Illinois, asking what final disposition had been made of the charter of the Harvey Medical College. The reply stated that the charter was canceled, July 1, 1902, for default in filing an annual report. A copy of the reply was forwarded to Mr. Hayward.[1]

Nothing more was heard until in October, 1918, when two cablegrams were received signed "Scott, President, Medical Council," asking whether a student named Ratten had, at any time, attended or graduated from Harvey Medical College. The cablegram stated that Ratten held a diploma from the college named, dated March 8, 1907. The President was informed that Ratten was not recorded either as a student or a graduate of the Harvey Medical College.

In December two more cablegrams were received from Dr. Scott, asking whether any Harvey Medical College was existing in Chicago in March, 1907. The reply was in the negative.[2]

The reason for the inquiries was made more clear in January, 1919, when a letter from Dr. Robert E. Scott, President of the Medical Council of Tasmania, explained that the cablegrams referred to one Victor Richard Ratten. He said that the Council of which he was President and which was a statutory body, constituted for the purpose of keeping a register of the qualified practitioners of Tasmania, was on the point of being abolished because it had dared to run counter to the premier, and had questioned Ratten's qualification.

A copy of the Hobart *Mercury* of Dec. 12, 1918, enclosed with Dr. Scott's letter, contained a report of a "Ratten Royal Commission" which, it was shown, had been appointed by the premier of Tasmania to inquire into charges against Ratten made by the Tasmania Branch of the British Medical Association. In the commissioner's report a diploma said to have been held by Ratten was reproduced as follows:—

HARVEY MEDICAL COLLEGE.

CHICAGO. Coat of Arms. ILLINOIS.

To all to whom this Diploma shall come, Greeting:

Be it known that VICTOR RICHARD RATTEN, having completed the Course of Study required by this institution and having passed a satisfactory examination and recommendation by the Faculty as qualified to enter upon the practice of Medicine and Surgery; and by virtue of the powers vested in us by the State of Illinois, we hereby confer upon him the Degree of

DOCTOR OF MEDICINE

with all the rights, privileges, immunities, and honours pertaining thereto.

IN TESTIMONY WHEREOF, the Harvey Medical College has caused this Diploma to be signed by the President and Secretary of the Board of Directors, and the official Corporate Seal to be hereto affixed at the City of Chicago in The State of Illinois, U.S.A., this eighth day of March, A.D., 1907.

HARRY P. HUSLEY, M.D., Dean of Faculty,
M. A. BROWN, M.D., Secretary of Faculty,
W. E. WARNER, M.D., Secretary of Board of Directors,
WILLIAM GALE FRENCH, A.M., M.D., President of Board of Directors.

INQUIRY BY COMMISSIONER.

In his report, the commissioner said he had seen the cable replies from the Council on Medical Education in regard to the non-existence of the Harvey Medical College, but, as a result of other inquiries, concluded, nevertheless, that it still existed. The commissioner stated that he had sent the following cablegram to *two individuals whose names were attached to Ratten's diploma*—a paper, the validity of which had been question:—

Have before me diploma of Victor Richard Ratten issued by you and others on behalf Harvey Medical College, dated March, 1907. Did you issue same, and what are relations of Harvey Medical College and Harvey-Jenner College?

To this the commissioner states he received the following replies:

Am looking up records; will cable to-morrow.—W. G. French.

And on the next day:

Diploma issued Victor Richard Ratten, March, 1907, by me and others on behalf Harvey no connection with Harvey-Jenner College.—W. G. French.

Cabled information received by the commissioner through the Continental and Commercial Bank of Chicago showed that Harvey Medical College, Chicago, was in 1907 a duly chartered institution.[3] Then follows the account of an examination of "Dr." Ratten. In answer to questions asked by the commissioner, Ratten is reported to have stated under oath that he was surgeon-superintendent of Hobart General Hospital; that he recognized the certificate (evidently the diploma of the Harvey Medical College already reproduced), and that it had been issued to him by the Harvey Medical College, which, he said, was then an existing institution. No questions are recorded in the report, asking whether the college ever held classes or carried on medical teaching or whether Ratten was ever in attendance, or studied medicine at the Harvey Medical College. In his report the commissioner concluded that the Harvey Medical College existed in 1907 and that the diploma which Victor Richard Ratten produced in 1907 was granted to him by the college named.

COMMENTS REGARDING THE INVESTIGATION.

Notwithstanding the fact that evidence was presented which questioned the validity of Ratten's diploma, the commissioner, according to the reports, secured evidence from those whose names were attached to the diploma and *who would not be expected to show that the diploma was invalid!*

[1] That more than one Harvey Medical College had been chartered was not suspected by the writer; it was not mentioned in the letter from the secretary of state of Illinois, and was not revealed until later, as shown in his report.

[2] As shown later in this report, the charter of the Harvey Medical College had been revived in 1907; the statement is true, nevertheless, that since 1905 no institution of that name has had a bona fide existence, with headquarters, faculty, published announcements, or which had openly enrolled students or conducted medical teaching.

[3] The cable did not ask whether the college existed on March 8, 1907, the date on Ratten's diploma.

The character of the investigation is further referred to in an editorial appearing in the *Medical Journal of Australia* of Dec. 28, 1918, page 523, as follows:

> Nothwithstanding the fact that a well-known official of the American Medical Association, the most reputable and representative medical institution in the United States of America, maintains that the Harvey Medical College did not exist in 1907, and that Ratten was neither a student nor a graduate of that body, the Royal Commissioner has found that a Harvey College not only existed in 1907, but actually issued a diploma to Victor Richard Ratten, setting out that he had passed through the prescribed course of study, and had satisfied the "Faculty" that he was qualified to practice medicine. It will be noted from the proceedings of the Commission that the Royal Commissioner failed to wait for information from the Attorney-General of Illinois, and merely announced his intention of obtaining the assistance of the American Government. Instead of seeking and acquiring official information from the most reliable source, the Royal Commissioner adopted the extraordinary procedure of communicating with the persons whose names appear on the diploma produced by Ratten. It is significant that those names are, so far as we are aware, unknown in Australia, and that, despite the repeated statement of the Secretary of the American Medical Association that the Harvey Medical College did not exist in 1907, the cabled assertion of the persons named on the document appears to have been accepted as final.

MORE RECENT INFORMATION.

The information received from Dr. Scott and from the commissioner's report led to a further investigation in regard to the Harvey Medical College by the Council on Medical Education. Following a conference with Mr. Francis W. Shepardson, director of the department of registration and education, the latter examined the records in the office of the secretary of state and discovered that, instead of one, three institutions had been incorporated which bore, or included, the name of the "Harvey Medical College." Mr. Shepardson reported these as follows:

1. Harvey Medical College incorporated, Nov. 23, 1891, by Alva Camp, Willard P. Case and Charles D. Camp. The subscribers to the capital stock were W. P. Case, 2 shares; G. E. Giles, 1 share; J. C. Ivey (or Irey), 10 shares; Charles D. Camp, 237 shares. Ivey and the two Camps and Frank C. Vierling, Frank Baker and J. R. Holmes made up the first board of trustees. This charter was canceled, July 1, 1902, because of failure to file an annual report.[4]

2. Harvey Medical College, incorporated, August 28, 1894, by James A. Stough, George Warren Reynolds and Charles D. Camp. These were the subscribers to the capital stock and the members of the first board of trustees. This college made annual reports until 1903. The charter was canceled by the secretary of state, March 5, 1904. It was reinstated, March 19, 1907. It has made annual reports each year up to and including Feb. 11, 1918. In that report it is said that the corportion is not now in actual existence, but "said corporation expects to resume active business as a medical college and desires to keep its charter intact." President, Dr. Frances Dickinson, 2750 W. 35th St., Chicago, care of Albert Dickinson Seed Company. Secretary and treasurer, Phillip S. Brown, Montana Bldg., Missoula, Mont. Their term of office "until their successors are elected." The statement also says that "the corporate seal is mislaid."

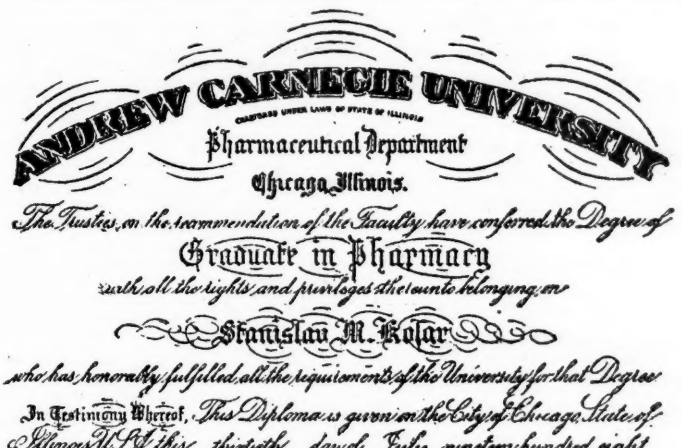
3. Harvey Medical College and Hospital, incorporated, Jan. 9, 1907, by William Gayle French, Harry P. Hurley, W. E. Warner and L. W. Rowell. Nov. 2, 1908, the name of this institution was changed to Jackson University, W. M. Marquardt was named as secretary, and W. G. French as president. Sept. 27, 1909, the name was changed to Jefferson University, W. M. Marquardt being secretary, E. S. Stafford, vice president, and W. G. French signing his name as notary public. This charter was canceled, on May 17, 1912, a proper notice of dissolution being filed by French and others.

[4] This is evidently the institution referred to by Secretary of State Emerson in his letter of Sept. 10, 1917, to which reference has already been made in this report.

Statements in the catalogues of the only bona fide Harvey Medical College—the only one which had the essential teachers and laboratories; the only one which openly enrolled students and issued annual announcements—show that the first two charters were secured for that school. Its last announcement that of 1904-1905, contains a historical statement which says that the Harvey Medical College was first incorporated in 1891 and for certain reasons obtained a new charter in July, 1894.

The information on file in our biographical department shows that the Harvey Medical College ceased to hold classes and teach students at the close of the session of 1904-1905; that in the session of 1905-1906 the students remaining were urged to enroll and finish their training in the Jenner Medical College; that its charter had expired in 1904, and that, although the charter was reinstated, March 19, 1907, the college did not resume medical teaching.

Doctor's "Diploma" Sells for $75; Its Grantor Is Quickly Arrested


ANDREW CARNEGIE UNIVERSITY
CHARTERED UNDER LAWS OF STATE OF ILLINOIS
Pharmaceutical Department
Chicago, Illinois.
The Trustees, on the recommendation of the Faculty have conferred the Degree of
Graduate in Pharmacy
with all the rights and privileges thereunto belonging, on
Stanislaw M. Kolar
who has honorably fulfilled all the requirements of the University for that Degree
In Testimony Whereof, This Diploma is given in the City of Chicago, State of Illinois, U.S.A. this thirtieth day of July nineteen hundred eight
W. M. Marquardt Pres.
William Gayle French A.M. M.D.
Fredrick C. Hanmeier Pharm. D.

The above is a reproduction of a diploma of the Andrew Carnegie University as it was reproduced in the Chicago *Tribune* of Aug. 2, 1908, accompanying the printed news item, which is also reproduced herewith. The two lines above the diploma were added in the *Tribune's* article. Note the signatures on the diploma.

WAS RATTEN'S DIPLOMA VALID?

From August, 1894, to July 1, 1902, the bona fide Harvey Medical College had two charters. The first of these was canceled, July 1, 1902, and the second was canceled in 1904. The latter was not revived until March 19, 1907—eleven days after the date on the diploma issued to Victor Richard Ratten. According to Mr. Shepardson's statement, in their reports, the officers of this college stated that the corporation was not in actual existence, but expected at some future time to resume active business as a medical college and for that reason desired to keep the charter intact. This shows that the institution was making no attempt to conduct classes or to teach medical students and, therefore, was not issuing degrees. As will be noted, neither of these charters were alive, March 8, 1907, the date on the diploma issued to Victor Richard Ratten.

Charter 3, that of the French-Hurley-Warner-Harvey Medical College and Hospital, incorporated, Jan. 9, 1907, is the only one which was legally alive, March 8, 1907. The names of the incorporators appear to be identical with those signed to Ratten's diploma. Although the name Harry P. Husley appears on the printed reproduction of Ratten's diploma, this could easily be due to mistaking the written "r" in Hurley for an "s." Note, however, that the name of the institution on the diploma issued to Victor Richard Ratten is not the "Harvey Medical College *and Hospital*" but

the "Harvey Medical College"—an institution which was not alive, March 8, 1907. This confusion of names throws still more doubt on the validity of Ratten's diploma.

Even after securing a charter for an institution, which seems to have had no existence except on paper, the French-Hurley-Warner crowd appears to have issued a diploma to Victor Richard Ratten under the name, not of the institution they had chartered, but under the name of what was a bona fide institution between 1891 and 1905. Additional light is thrown on the practice of those who incorporated the Harvey Medical College and Hospital by the fact that after a year and ten months the name of that institution was changed to the "Jackson University," and ten months later was again changed to the "Jefferson University." Note also in Mr. Shepardson's account of the Harvey Medical College and Hospital that after the name was changed to the Jackson and Jefferson Universities, one W. M. Marquardt was named as secretary and W. G. French as president. This indicates a relationship between the French-Hurley-Warner crowd with another institution reported to have existed on paper only, the Andrew Carnegie University, which in 1908 issued an alleged illegal diploma bearing the names of W. M. Marquardt and William Gayle French. Another statement bearing on the validity of Ratten's diploma is that of Dr. Frances Dickinson, who was president of the bona fide Harvey Medical College during its existence, who says that any diploma of Harvey Medical College issued after 1894 was invalid unless it bore her personal signature. She also says that neither French, Hurley nor Warner ever had any relationship with the Harvey Medical College either as officers or as faculty members.

CHICAGO SUNDAY TRIBUNE: AUGUST 2. 1908.

SUNDAY TRIBUNE: AU

BOGUS DIPLOMAS FOR SALE AT $75.

Two Men Pretend to Be Able to "Fix" the State Board of Health with Money.

DRUG CLERK TRAPS THEM

Scheme Declared to Be Worst "Fake" Medical College Ever Unearthed.

Through an arrest of two men who yesterday tried to fleece a west side drug clerk out of $75 for a pretended diploma in pharmacy the Lawndale police unearthed a "fake" medical college.

C. G. Hoffman, attorney for the state board of health, declares the case to be the most flagrant that has ever come to his notice.

The men under arrest are William G. French and Flavia Jindra, both of whom claim to be physicians. Neither is more than 25 years old. A few days ago they called upon Stanislaus M. Kolar, a drug clerk at Twenty-sixth street and Homan avenue, and represented to him that they could "fix" the state board of health so that he could procure a diploma without taking the regular examination. They would have to "fix" Dr. James A. Egan, secretary of the board, they said, but this could be done for a money consideration.

Drug Clerk Tells the Police.

Kolar told the visitors that he would think the matter over, and when they would call again he said he would be able to give them a definite answer.

He reported the proposition to Detectives Houlihan and Brophy of the Lawndale station. They told him to pretend that he wanted to purchase the diploma and in that way the men would be trapped.

After several interviews with Kolar, the two "professors" informed him that the diploma was ready and would be given him for $75. It was arranged that he was to meet French and Jindra yesterday afternoon at the Great Northern hotel.

Delivery of the Diploma.

The detectives notified Attorney Hoffman, and he was at the Great Northern when Kolar appeared, at 4 o'clock. French and Jindra shook hands with Kolar and led him from the hotel to Wabash avenue and Washington street. Hoffman and the two detectives trailed along behind.

When Kolar and the two "doctors" reached Wabash avenue and Washington street French disappeared for a few minutes. When he returned he carried in his hand the bogus diploma.

Kolar was then led by the men to the entrance of a building where he was shown the diploma with his name nicely written on it. "Andrew Carnegie university" was the name of the college, and the diploma was signed by French as "president of the board of trustees." The name "Frederick C. Hanmore" is signed to the diploma as dean of the faculty, and the registrar is "W. W. Marquardt."

Attorney Hoffman says that the latter named person is the wife of French.

Detectives Pounce on the Pair.

After Kolar had handed over the $75 to the men and was walking away with the diploma the detectives rushed up and arrested French and Jindra. They are charged with operating a confidence game.

Jindra lives at Twenty-fifth street and Trumbull avenue. He at one time was connected with a hospital in Europe.

French lives at Homan avenue. He claims to be a graduate of the Hahnemann Medical college and has practiced in Texas.

Calls Them a Bold Pair.

"They are the boldest pair that I have ever met with," said Attorney Hoffman. "I learn that they purchased a lot of surgical instruments and medical supplies, and they were going to Milwaukee to open a hospital. The Andrew Carnegie institution, which they claimed to be at the head of, does not exist. I would not be surprised to hear that they have sold a number of fake diplomas."

The above is a reproduction of the news-comment which accompanied the publication of the diploma of the Andrew Carnegie University, also reproduced herewith.

RECORD OF WILLIAM GAYLE FRENCH.

The commissioner's report gives "William Gale French, A.M., M.D., President of Board of Directors." The records of the American Medical Association show that William *Gayle* French was born in 1885; graduated from Hahnemann Medical College and Hospital, Chicago, 1906; was licensed in Texas and in Michigan in 1907, in Indiana in 1908 and in Illinois in 1913. The medical directories show frequent changes of address as follows: In 1906 in Brook, Ind.; in 1919, Greensburg, Ind.; in 1910, Indianapolis; in 1912, Kingsbury and Laporte, Ind., and 1914 and 1916, inclusive, Chicago. It is William *Gayle* French also who is reported among the incorporators of the Harvey Medical College and Hospital.

The cablegrams received by the commissioner at Hobart leads one to believe that this is the French whose name appears on the diploma issued to Victor Richard Ratten. It is not probable that there are two individuals having names so nearly alike.

In the Chicago *Tribune* of Aug. 2, 1908, was published a photographic reproduction of another alleged bogus diploma—one from the "Andrew Carnegie University" which bears the name of William Gayle French as "President of the Board of Trustees," and of W. M. Marquardt as "Registrar."[5] According to the report in the same paper, French was arrested by two detectives in the act of delivering the diploma and receiving $75 for it. The report also says that the Andrew Carnegie University has no existence except on paper. This report indicates, therefore, that William Gayle French was not averse to handling bogus diplomas.

News clippings from the Chicago *Herald* for Oct. 5, 1915, and the Chicago *Tribune* for Oct. 20, 1915, report the arrest of William Gayle French and another physician in connection with an alleged abortion produced on a young woman who died under the operation. The man with French seems to have been held to the grand jury; French, himself, was exonerated. French then changed his address to Detroit, Mich. A clipping from the Detroit *Times*, June 26, 1918, under the head "Warrants Out For Quacks," states that warrants were issued for the arrest of Dr. W. G. French charging him with violating the state law against advertisements for the cure of venereal diseases. In the Detroit *Times* of July 1, 1918, under the heading "Quacks on the Jump to Escape," the following statement appears:

> The quacks are on the run. Dr. W. H. French whose "sick men" advertisements were the delectation of readers . . . . . of family newspapers, has left the city two jumps ahead of the warrant which Special Prosecutor Henry A. Montgomery swore out against him.

The Chicago and Detroit papers made other statements similar to those quoted reflecting on French's character.

A letter dated July 23, 1918, from B. D. Harison, secretary of the Michigan State Board of Registration in Medicine, says:

> Dr. William Gayle French, Detroit,—Two warrants issued against him, one for immoral advertising and the other for obtaining money under false pretenses. Warrants were not served owing to the fact that he left for parts unknown before service could be effected.

[5] See the reference to these men in the description of the French-Hurley-Warner-Harvey Medical College and Hospital.

CONCLUSION.

As we have seen, two institutions were chartered bearing the name of "Harvey Medical College," and one was chartered with the title "Harvey Medical College and Hospital." The last named was the only institution having a legal existence, March 8, 1907, the date on the diploma issued to Victor Richard Ratten; but even this was not chartered until Jan. 9, 1907, only two months prior to the date on Ratten's diploma, and the signatures on Ratten's diploma would also indicate that this is the institution which issued it. It was not in existence long enough, however, to have given even a single term of instruction, and there is no evidence to show that it ever had a college building large enough for the conducting of classes, that it ever possesed a faculty or laboratory equipment, or that it ever issued an announcement or did actual teaching. Note, also, that the legal title of this institution is the "Harvey Medical College *and Hospital*," whereas, the heading of the diploma issued to Ratten, as reproduced in the royal commissioner's report, was the "Harvey Medical College." Again it is evident that the names signed to the diploma issued to Ratten are of persons who had no connection, official or legal, with the institution which issued it. Again, the institution named on the diploma issued to Ratten had no actual existence later than 1905, so far as an organized faculty, laboratory equipment and teaching facilities are concerned, and its charter, which had been canceled in 1904, was not revived until March 19, 1907, eleven days after the date on Ratten's diploma. All these facts indicate the fraudulent character of the diploma issued to Victor Richard Ratten, which evidence is strengthened by the fact that a year later one of the persons named as having signed Ratten's diploma is reported to have been caught in the act of selling an alleged bogus diploma to another individual.

This matter is still under investigation by the Tasmania Branch of the British Medical Association.

On August 13, 1919, the President of the Tasmanian Branch of the British Medical Association forwarded to the Premier of Tasmania a letter and numerous documents collected especially for the purpose in Chicago, proving up to the hilt the charges set out in the article in the *Journal of the American Medical Association*. On October 3, 1919, the Premier refused to grant the request of the Tasmanian Branch to appoint a fresh Royal Commission to inquire into the allegations. He suggested that the Branch should move as complainants before the Medical Board. Further correspondence has passed between the Tasmanian Branch and the Premier of Tasmania. The Premier still refuses to take any action. It may be necessary in a subsequent issue, to publish the whole correspondence.

British Medical Association News.

SCIENTIFIC.

A meeting of the Queensland Branch was held in the B.M.A. Room, Adelaide Street, Brisbane, on October 3, 1919, Dr. A. Sutton, the President, in the chair.

Dr. G. P. Dixon exhibited a child on whom he had performed nephrectomy for renal sarcoma. He drew attention to the advantages of a horizontal incision instead of the more usual vertical one.

Dr. D. A. Cameron showed a girl with bronchiectasis. The condition had developed after the removal of her tonsils and of adenoid vegetations. The condition had been cured by operation.

He also presented a young girl who had suffered from abscess of the lung complicating influenza. An operation had been performed and recovery had taken place.

Dr. Cameron's third case was one of hydatid of the liver. The blood count had revealed a somewhat unusual condition of the blood. Symptoms of acute nephritis had appeared about a week after the operation. The condition had been dealt with operatively and the abdomen closed without drainage. Complete recovery followed in three weeks.

He also showed a liver of a child who had died. The specimen was one of a rare condition of cysts of the liver containing clear fluid. He stated that the pathology of these cases was imperfectly understood. Bland-Sutton considered these cysts to be dilatations of the bile ducts.

In the last place Dr. Cameron exhibited a photo-micrograph of a slide showing a pure culture of anthrax bacilli from the face of a woman. The culture had been obtained from the blood of a guinea pig injected with the material from the pustule. The patient had recovered after excision and cautery.

Dr. L. M. McKillop asked Dr. Donald Cameron why he had described the first case as bronchiectasis instead of intra-pulmonary abscess. There were three points which led him to the opinion that the condition was that of an abscess. In the first place, there was the fact that the lesion following quickly upon the tonsillectomy, which was a recognized cause of pulmonary abscess. In the second place, he thought that the condition yielded too rapidly to adequate drainage to be a bronchicetasis. The third point was that the skiagram showed that the heart was displaced toward the opposite side, which was unusual in cases of bronchiectasis.

In regard to the hydatid case, Dr. McKillop expressed the opinion that the cause of the symptoms presented by Dr. Cameron's patient was a toxæmia of the nature of angio-neurotic œdema, which was not infrequently seen in this disease. The condition was probably not a true nephritis, in view of the fact that the albumen had disappeared within a short time from the urine.

Dr. R. Graham Brown exhibited a woman with acute double glaucoma.

Dr. R. A. Macleod read a paper entitled "Intestinal Obstruction" (see page 391).

The President thanked Dr. Macleod for his paper and Dr. D. A. Cameron expressed the opinion that it was not only interesting, but was a masterly and instructive one.

Owing to the lateness of the hour, no discussion took place, but the President expressed the hope that after the paper had been published in *The Medical Journal of Australia*, the members would meet for this purpose.

MEDICO-POLITICAL.

A meeting of the Queensland Branch was held at the B.M.A. Room, Adelaide Street, Brisbane, on October 3, 1919, Dr. A. Sutton, the President, in the chair.

The President welcomed Major J. J. Power on his return from active service and congratulated him on his achievements, which had resulted in the award of the Distinguished Service Order.

Australasian Medical Congress.

Dr. A. Stewart appealed to the members of the Queensland Branch for their co-operation in the preparations for the Australasian Medical Congress, which would be held in August, 1920.

Medical Officers' Relief Fund.

Dr. J. Espie Dods made an appeal to the members present for donations to the Medical Officers' Relief Fund.

Fees for Life Insurance Examination.

A letter was read from the Federal Committee, asking the Branch to reconsider the question of the rate of remuneration for examination of proponents for life insurance. It was moved by Dr. J. C. Hemsley and seconded by Dr. J. Espie Dods:—

> That the fees for life insurance examination and report be not less than £1 1s.

Dr. J. Lockart Gibson spoke in favour of the motion, which was carried unanimously.

Appointment of Honorary Medical Officers at the Brisbane General Hospital.

Dr. A. H. Marks moved that the following recommendation of the Council should be adopted as a resolution of the Branch:—

> That the President and Honorary Secretary wait upon the Minister and present the Council's scheme as amended at a special meeting of the Branch, held on September 19, 1919 (see *The Medical Journal of Australia*, October 18, 1919, page 341).

The motion was seconded by Dr. R. Graham Brown and was carried.

H. A. Chandos Wall, Esq., M.B., 1915 (Univ. Sydney), of 84 Cavendish Street, Stanmore, has been nominated for election as a member of the New South Wales Branch.

Wendell Inglis Clark, Esq., M.B., B.S., 1912 (Univ. Melb.), of 15 Strahan Street, North Hobart, has been elected a member of the Tasmanian Branch.

MEDICAL OFFICERS' RELIEF FUND (FEDERAL).

The Trustees acknowledge, with thanks, receipt of the following donations and promises to the above-named Fund:—

(SEVENTH LIST.)

South Australia.

	£	s.	d.
Dr. W. A. Verco	150	0	0
Dr. R. Humphrey Marten	100	0	0
Dr. W. T. Hayward	50	0	0
Dr. A. A. Lendon	30	0	0
Dr. A. Krakowsky	30	0	0
Dr. Gerald Hayward	25	0	0
Dr. D. R. W. Cowan	25	0	0
Dr. J. R. Tobin	15	15	0

New South Wales.

Drs. David Thomas, Harold Thomas and R. B. Minnett	52	10	0
Dr. John Morton	50	0	0
Dr. G. A. Buchanan	21	0	0
Dr. Mary B. Burfitt	20	0	0
Dr. Allan S. Walker	15	15	0
Dr. Norman Dowling	10	10	0

Victoria.

Dr. J. S. Buchanan	50	0	0
Dr. J. F. Mackeddie	21	0	0
Victorian Branch (surplus from Dinner)	17	13	8
Dr. Percy V. Langmore	15	0	0

Total to November 4, £9,015 7s. 5d.

Naval and Military.

HONOURS.

In the *Commonwealth of Australia Gazette*, No. 124, of October 30, 1919, extracts are produced from the *London Gazette* naming the members of the Australian Imperial Force who have been mentioned in the despatches of Sir Douglas Haig of March 16, 1919. The following are the medical officers whose names appear in this list:—

Colonel A. H. Marks, D.S.O., Australian Army Medical Corps.
Major J. S. Smyth, 9th Field Ambulance, Australian Army Medical Corps.
Lieutenant-Colonel F. C. Wooster, 13th Field Ambulance.
Captain B. McN. Beith, 3rd General Hospital, Australian Army Medical Corps.
Captain (temporary Major) G. Bell, Australian Army Medical Corps.
Major A. S. Curtin, 4th Field Ambulance, Australian Army Medical Corps.
Major J. W. Farrar, 3rd General Hospital, Australian Army Medical Corps.
Lieutenant-Colonel P. Fiaschi, Australian Army Medical Corps.
Major (temporary Lieutenant-Colonel) J. A. James, Australian Army Medical Corps.
Colonel F. A. Maguire, D.S.O., 3rd Field Ambulance, Australian Army Medical Corps.
Major L. May, D.S.O., M.C., Australian Army Medical Corps, attached 11th Battalion.
Captain A. L. McLean, M.C., Australian Army Medical Corps.
Major R. B. North, Australian Army Medical Corps, attached 4th Australian Divisional Train, Australian Army Service Corps.
Major P. J. F. O'Shea, D.S.O., M.C., Australian Army Medical Corps, attached 8th Battalion.
Captain C. A. Oxley, Australian Army Medical Corps.
Lieutenant-Colonel (temporary Colonel) K. Smith, C.M.G., Australian Army Medical Corps.
Lieutenant-Colonel C. W. Thompson, M.C., 14th Field Ambulance, Australian Army Medical Corps.
Major K. M. Whiting, 12th Field Ambulance, Australian Army Medical Corps.
Major H. H. Willis, 3rd Field Ambulance, Australian Army Medical Corps.
Major J. C. Campbell, D.S.O., 7th Field Ambulance, Australian Army Medical Corps.
Major L. R. Cook, 6th Field Ambulance, Australian Army Medical Corps.
Major D. D. Coutts, D.S.O., 6th Field Ambulance, Australian Army Medical Corps.
Major R. F. Craig, D.S.O., 15th Field Ambulance, Australian Army Medical Corps.
Major A. P. Drummond, 5th Field Ambulance, Australian Army Medical Corps.
Colonel T. P. Dunhill, Australian Army Medical Corps.
Captain J. W. Grieve, Australian Army Medical Corps, attached 6th Battalion.
Major F. D. H. B. Lawton, Australian Army Medical Corps.
Lieutenant-Colonel H. B. Lewers, O.B.E., 11th Field Ambulance.
Captain E. I. Littlejohn, 3rd Casualty Clearing Station.
Captain F. Meldrum, 6th Field Ambulance, Australian Army Medical Corps.
Captain R. L. Park, 5th Field Ambulance, Australian Army Medical Corps.
Major M. V. Southey, 1st Field Ambulance, Australian Army Medical Corps.
Captain W. J. Trewhella, 2nd General Hospital, Australian Army Medical Corps.
Major F. T. Wheatland, 10th Field Ambulance, Australian Army Medical Corps.
Colonel M. H. Downey, D.S.O., Australian Army Medical Corps.
Captain H. W. Franklands, 4th Sanitary Section, Australian Army Medical Corps.
Major (temporary Lieutenant-Colonel) J. R. Muirhead, 5th Field Ambulance, Australian Army Medical Corps.
Colonel A. E. Shepherd, D.S.O., Australian Army Medical Corps.
Major C. T. Turner, 3rd General Hospital, Australian Army Medical Corps.
Colonel G. W. Barber, C.M.G., D.S.O., Australian Army Medical Corps.
Lieutenant-Colonel A. H. Gibson, 1st Casualty Clearing Station.
Major (temporary Lieutenant-Colonel) V. O. Stacy, 2nd Casualty Clearing Station.

APPOINTMENTS.

The following appointments, etc., have been announced in the *Commonwealth of Australia Gazette*, No. 124, of October 30, 1919:—

Australian Imperial Force.

APPOINTMENTS TERMINATED.

Second Military District.

Major A. T. Dunlop, D.S.O., 23rd October, 1919.
Major E. H. M. Stephen, 26th October, 1919.
Major E. L. Hutchinson, D.S.O., 3rd October, 1919.
Captain R. J. Haynes, 10th September, 1919.
Captain D. A. A. Davis, 1st October, 1919.
Captain P. A. Morris, 26th September, 1919.
Captain C. G. Templeman, 9th October, 1919.
Captain R. S. Scott, 20th September, 1919.
Captain D. L. Howell, 20th September, 1919.
Captain U. L. Bourke, 5th September, 1919.
Captain E. S. Morris, 17th September, 1919.

Third Military District.

Lieutenant-Colonel M. W. Cave, 5th September, 1919.
Major M. V. Southey, 28th October, 1919.
Major F. C. Burke-Gaffney, 18th October, 1919.

Major H. W. F. Mitchell, M.C., 28th October, 1919.
Major R. D. Bartram, 27th September, 1919.
Major E. Champion, 5th October, 1919.
Major J. S. Mackay, M.S., 11th August, 1919.
Captain R. C. Bassett, 17th October, 1919.
Captain R. L. Park, 28th September, 1919.
Captain S. W. Shields, 31st July, 1919.

Australian Military Forces.

GRANT OF HONORARY RANK.

The undermentioned who have served in the Australian Imperial Force as commissioned officers having the rank held by them in the Australian Imperial Force confirmed as honorary rank in the Australian Military Forces, as follows:—

Officers who, on appointment for active service outside Australia, were serving and are now serving in the Australian Military Forces.

Second Military District.

To be Honorary Majors—

Honorary Captain W. R. Clay, Australian Army Medical Corps Reserve, 28th September, 1916.
Honorary Captain H. L. Tooth, Australian Army Medical Corps Reserve, 11th November, 1918.

Third Military District.

To be Honorary Major—

Captain F. L. Bignell, D.S.O., Australian Army Medical Corps Reserve, 12th October, 1917.

The undermentioned, who have served in the Australian Imperial Force as Commissioned Officers, being appointed to the Reserve of Officers (temporarily), and being granted honorary rank equivalent to that held by them in the Australian Imperial Force:—

Officers who, on appointment for active service outside Australia, were not serving in the Australian Military Forces.

Second Military District.

To be Honorary Major—

R. McD. Bowman, 20th June, 1917.

Third Military District.

To be Honorary Majors—

C. N. Finn, O.B.E., 14th November, 1916.
W. H. Rennick, 24th August, 1917.

To be Honorary Captain—

H. Sutton, 14th March, 1916.

THE TREATMENT OF DISCHARGED SOLDIERS.

The Comptroller of the Department of Repatriation has communicated with the Honorary Secretaries of the various Branches of the British Medical Association by a letter dated October 16, 1919, in respect to the treatment of discharged soldiers. Although the majority of practitioners are aware that the Department is under no obligation to pay for the examination and treatment of ex-soldiers who are suffering from alleged war disabilities when the examination and treatment is carried out by practitioners other than the officially appointed military medical officers, it is deemed advisable to publish this letter.

Dear Sir,—Frequent cases have come under the notice of this Department where military medical officers and private practitioners have examined and treated ex-soldiers who are suffering from alleged war disabilities the discharged soldiers concerned then forwarding their claims for re-imbursement for such treatment rendered to this Department for payment.

I should be glad if you would kindly advise all members of your Association that a definite system of after-discharge medical treatment exists for the provision of medical treatment, including surgical operations and specialists' consultations, for all discharged soldiers suffering from disabilities due to or aggravated by active service.

This Department has appointed local medical officers in all systemized areas throughout the Commonwealth, and these special officers are empowered to attend to the requirements of the discharged soldiers suffering from active service disabilities and, if necessary, refer them for specialist treatment or operation.

In future this Department will not accept liability in respect to any claim rendered by a member of the profession who treats any discharged soldier without first referring the case to this Department for guidance and direction as to what treatment may be given.

Yours faithfully,
(Sgd.) D. J. GILBERT,
Comptroller.

PREVENTIVE MEDICINE.

Hygienists and others interested in the health conditions of the Commonwealth will recognize the importance of the reference to prospective health legislation made by Mr. W. M. Hughes, the Prime Minister of Australia, in his policy speech at Bendigo on October 30, 1919. He said:—

> With the exception of quarantine all matters affecting public health are within the control of the States. It is doubtful whether Australia will ever be able to satisfactorily cope with some of her grave problems while exclusive power remains with the local authorities. Many preventible diseases still ravage our people and the full co-operation of all our Governments is alone likely to lead to success. Tuberculosis, venereal complaints, typhoid, and other epidemics will yield to treatment if all the forces of Government are combined in their attack. The Government is prepared either in conjunction with the States or independently if such conjunction is impossible, to undertake this urgent task.

It will be noted that the policy involved in this statment coincides very closely to that enunciated by the Federal Committee of the British Medical Association in Australia. *The Medical Journal of Australia* has urged for a considerable time an extension of public health activities, especially in the direction of preventive medicine.

ALVARENGA PRIZE OF THE COLLEGE OF PHYSICIANS OF PHILADELPHIA.

The College of Physicians of Philadelphia announces that the next award of the Alvarenga Prize, being the income for one year of the bequest of the late Señor Alvarenga, and amounting to about two hundred and fifty dollars, will be made on July 14, 1920, provided that an essay deemed by the Committee of Award to be worthy of the Prize shall have been offered.

Essays intended for competition may be upon any subject in medicine, but cannot have been published. They must be typewritten and, if written in a language other than English, should be accompanied by an English translation and must be received by the Secretary of the College on or before May 1, 1920.

Each essay must be sent without signature, but must be plainly marked with a motto and be accompanied by a sealed envelope, having on its outside the motto of the paper and within the name and address of the author.

It is a condition of competition that the successful essay or a copy of it shall remain in possession of the College; other essays will be returned upon application within three months after the award.

No Alvarenga Prize for 1919 was awarded.

Correspondence.

GOVERNMENT MEDICAL OFFICERS.

Dear Sir,—With reference to a letter appearing in the *Journal* of 1st inst., suggesting that the appointments of Government medical officers be given to returned medical officers, this subject was discussed at a recent Committee Meeting of the Society of Returned Medical Officers of New South Wales and the following opinion arrived at, *viz.*:—

> That in cases where the appointment was held prior to August, 1914, no change should be asked for. All appointments since that time, if not made to returned medical officers, should be subject to revision. In all new appointments preference was to be given to returned medical officers.

Steps are being taken in this matter along the above lines.

We would point out that our Society has been formed with the object of dealing with such matters as this and it would greatly assist the committee if all returned medical officers would become members and refer all such problems to the Society direct.

Yours, etc.,

HUGH R. G. POATE } Joint Honorary
CHARLES E. WASSELL } Secretaries.

225 Macquarie Street,
November 1, 1919.

Medical Appointments.

The resignations of Dr. A. E. Stenning as District Medical Officer at Youanmi and of Dr. R. C. Cotton (B.M.A.) as Medical Officer of Health to the Kellerberrin Local Health Authority, Western Australia, have been accepted.

It is announced in the *Queensland Government Gazette* of November 1, 1919, that Dr. M. S. Patterson (B.M.A.) has been appointed Part-Time Medical Inspector of Schools at Ipswich, in place of the late Dr. John Flynn.

Medical Appointments Vacant, etc.

For announcements of medical appointments vacant, assistants, locum tenentes sought, etc., see "Advertiser," page xxiii.

Medical and Health Department of Western Australia: Medical Officer of Health and Assistant Inspector of Hospitals.

The University of Melbourne: Temporary Sub-Curator of the Museum of Pathology.

Ballara District Hospital, Queensland: Medical Officer.

Medical Appointments.

IMPORTANT NOTICE.

Medical practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, 429 Strand, London, W.C.

Branch.	APPOINTMENTS.
VICTORIA. (Hon. Sec., Medical Society Hall, East Melbourne.)	All Friendly Society Lodges, Institutes, Medical Dispensaries and other Contract Practice. Australian Prudential Association Proprietary, Limited. Mutual National Provident Club. National Provident Association.
QUEENSLAND. (Hon. Sec., B.M.A. Building, Adelaide Street, Brisbane.)	Australian Natives' Association. Brisbane United Friendly Society Institute. Cloncurry Hospital.
TASMANIA. (Hon. Sec., Macquarie Street, Hobart.)	Medical Officers in all State-aided Hospitals in Tasmania.
SOUTH AUSTRALIA. (Hon. Sec., 3 North Terrace, Adelaide.)	Contract Practice Appointments at Renmark. Contract Practice Appointments in South Australia.
WESTERN AUSTRALIA. (Hon. Sec., 6 Bank of New South Wales Chambers, St. George's Terrace, Perth.)	All Contract Practice Appointments in Western Australia.
NEW SOUTH WALES. (Hon. Sec., 30-34 Elizabeth Street, Sydney.)	Australian Natives' Association. Balmain United Friendly Societies' Dispensary. Canterbury United Friendly Societies' Dispensary. Friendly Society Lodges at Casino. Friendly Society Lodges at Lithgow. Friendly Society Lodges at Parramatta, Auburn and Lidcombe. Leichhardt and Petersham Dispensary. Manchester Unity Oddfellows' Medical Institute, Elizabeth Street, Sydney. Marrickville United Friendly Societies' Dispensary. Newcastle Collieries—Killingworth, Seaham Nos. 1 and 2, West Wallsend. North Sydney United Friendly Societies. People's Prudential Benefit Society. Phœnix Mutual Provident Society..
NEW ZEALAND: WELLINGTON DIVISION. (Hon. Sec., Wellington.)	Friendly Society Lodges, Wellington, New Zealand.

Diary for the Month.

Nov. 11—N.S.W. Branch, B.M.A., Ethics Committee.
Nov. 12—Vic. Branch, B.M.A..
Nov. 12—North Eastern Med. Assoc. (N.S.W.).
Nov. 13—Vic. Branch, B.M.A. Council.
Nov. 14—N.S.W. Branch, B.M.A., Clinical.
Nov. 14—Q. Branch, B.M.A.. Council.
Nov. 14.—S. Aust. Branch, B.M.A..
Nov. 18—Tas. Branch, B.M.A., Branch and Council.
Nov. 18—N.S.W. Branch, B.M.A., Executive and Finance Committee; Illawarra Suburbs Med. Assoc. (Annual).
Nov. 19—W. Aust. Branch, B.M.A., Branch and Council.
Nov. 25.—N.S.W. Branch, B.M.A., Medical Politics Committee; Organization and Science Committee.
Nov. 25.—Vic Branch, B.M.A., ballot paper issued for election of office-bearers of Branch.
Nov. 26.—Vic. Branch, B.M.A., Council.
Nov. 27.—S. Aust. Branch, B.M.A..
Nov. 28.—Q. Branch, B.M.A., Council.
Nov. 28.—N.S.W. Branch, B.M.A..
Dec. 2.—N.S.W. Branch, B.M.A., Ethics Committee.

EDITORIAL NOTICES.

Manuscripts forwarded to the office of this journal cannot under any circumstances be returned.

Original articles forwarded for publication are understood to be offered to *The Medical Journal of Australia* alone, unless the contrary be stated.

All communications should be addressed to "The Editor," *The Medical Journal of Australia*, B.M.A. Building, 30-34 Elizabeth Street, Sydney.